1-1 Name		Date	
Homework			
Write the number of tens in each number.	and the number of ones		
<b>1.</b> 56	<b>2.</b> 708	3. 6,170	
tens	tens	tens	
ones	ones	ones	
Write the number of thousands and the number of hundreds in each number.			
<b>4.</b> 4,982	<b>5.</b> 316	<b>6</b> . 2,057	
thousands	thousands	thousands	
hundreds	hundreds	hundreds	
Make a place-value drawing for each number, using ones, quick tens, hundred boxes, and thousand bars.			
<b>7.</b> 36	<b>8.</b> 510		

**10.** 1,072

**9.** 403

1-1 Name	Date
Remembering	
Multiply or divide.	
<b>1.</b> 8 × 3 =	<b>2.</b> 40 ÷ 4 =
<b>3.</b> 27 ÷ 9 =	4. 7 × 6 =
5. 2 × 8 =	<b>6.</b> 6 × 5 =
Use the diagram to complete E	xercises 7–10.
$\bigstar \And \And \And \And \checkmark \checkmark$	$r \Leftrightarrow \Leftrightarrow$
	z shz shz
$\begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ $	$r \overleftrightarrow \checkmark$
Write two related multiplicatio	n problems for the diagram.
7	8
Write two related division prob	lems for the diagram.
9	10
<b>11. Stretch Your Thinking</b> Marc drawing represents the nun represents 483. Which stude the error.	nber 4,083. Owen says it

1-2 Name	Date
Homework	
Read and write each number in standa	ard form.
<b>1.</b> 90 + 2	<b>2.</b> 600 + 80 + 9
<b>3.</b> 2,000 + 800 + 50 + 7	<b>4.</b> 3,000 + 80 + 5
Read and write each number in expan	ded form.
5. 48	<b>6.</b> 954
7. 6,321	<b>8.</b> 4,306
<b>9.</b> 1,563	<b>10</b> . 2,840
Read and write each number in word	form.
<b>11</b> . 300 + 20 + 5	
<b>12</b> . 5,000 + 700 + 40 + 8	
<b>13</b> . 9,000 + 400 + 6	
Read and write each number in standa	ard form.
<b>14</b> . seventy-six	
<b>15</b> . three hundred one	
16. four thousand, two hundred sixtee	n
<b>17</b> . five thousand, one hundred forty-t	WO
Write the value of the underlined digi	t.
<b>18</b> . 2 <u>8</u> 7 <b>19</b> . <u>8</u> ,792 _	<b>20</b> . 7, <u>8</u> 12

1-2 Re	<u>Name</u>		Date
Mu	tiply or divide.		
1.	6 × 4 =	<b>2.</b> 56 ÷ 8 =	
3.	45 ÷ 9 =	<b>4.</b> 6 × 6 =	
5.	3 × 7 =	<b>6.</b> 48 ÷ 6 =	
7.	Grace read six books over the read three times that numbe did Grace's sister read over th	er. How many books	
	te the number of thousands dreds in each number.	and the number of	
8.	5,812	<b>9.</b> 7,026	
	thousands	thou	isands
	hundreds	hunc	dreds
	ke a place value drawing for s, quick tens, hundred boxes	÷	
10.	603	<b>11.</b> 3,187	
10	Stratch Vour Thinking Mr. Th	nomas writes 1 061 on the bas	ard
12.	•	nomas writes 4, <u>9</u> 64 on the boa oderlined digit is 9. Chris said t	

Round each number to the nearest ten. 1. 46 2. 381 **3.** 4,175 \_\_\_\_\_ **4.** 5,024 \_\_\_\_\_ Round each number to the nearest hundred. **5**. 789 \_\_\_\_\_ **6**. 971 \_\_\_\_\_ **7**. 2,759 \_\_\_\_\_ **8**. 3,148 \_\_\_\_\_

Round each number to the nearest thousand.

**9.** 6,578 \_\_\_\_\_ **10**. 4,489 \_\_\_\_\_ **11**. 8,099 \_\_\_\_\_ **12**. 2,761 \_\_\_\_\_

Compare using >, <, or =.

**13**. 4,538 ( 1,298 **17**. 4,004 () 4,034 **18**. 5,609 ( **16**. 7,235 ( ) 6,987 ) 5,059

# Solve.

19. When you round a number, which digit in the number helps you decide to round up or round down? Explain your answer.

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20. When you round a number, what should you do with the digits to the right of the place to which you are rounding?

1-3

Homework

1-3	Name	Date
R	emembering	
Fin	d the unknown number.	
1.	4 × 8 =	<b>2.</b> 42 ÷ 7 =
3.	63 ÷ = 9	<b>4.</b> × 5 = 40
5.	9 × = 81	<b>6.</b> ÷ 6 = 10
7.	21 ÷ 7 =	<b>8.</b> 10 × = 100
	ite the number of tens and the numb h number.	er of ones in
9.	607	<b>10.</b> 9,324
	tens	tens
	ones	ones
Rea	ad and write each number in standard	l form.
11.	40 + 3	<b>12.</b> 500 + 70 + 9
13.	1,000 + 200 + 50 + 8	<b>14.</b> 8,000 + 70 + 7
<b>15. Stretch Your Thinking</b> Sara is thinking of a number. When she rounds her number to the nearest hundred, she gets 700. What is the greatest number Sara can be thinking of? Explain.		

1-4 Name	Date
Homework	
Read and write each number in expa	anded form.
<b>1</b> . 39,012	<b>2.</b> 640,739
<b>3.</b> 102,453	<b>4.</b> 460,053
Read and write each number in wor	d form.
5. 1,000,000	
<b>6.</b> 730,812	
<b>7</b> . 45,039	
<b>8</b> . 600,439	
Read and write each number in expa	anded form.
<ol> <li>nine hundred twenty-three thousand, nine hundred twenty-three</li> </ol>	<b>10.</b> one hundred forty thousand, one hundred four
<b>11.</b> seventy-six thousand, five	<b>12.</b> fifty-nine thousand, two hundred sixty-one
<b>13.</b> seven hundred thousand, four hundred thirty	<b>14.</b> thirty-one thousand, two hundred seventy-nine

1-4 Name		Date	9
Remembering			
Use the numbers 7, 9, and 63 to com	plete the related	l equations.	
<b>1.</b> 7 × =	<b>2.</b> 9 ×	=	
<b>3</b> ÷ = 7	4	_ ÷	_ = 9
Solve.			
5. Aileen made 36 mini muffins for t Each bag holds four mini muffins. mini muffins will she have for the	How many bag		
Read and write each number in expa	nded form.		
<b>6.</b> 86	<b>7.</b> 421		
<b>8.</b> 7,915	<b>9.</b> 3,402		
Write the value of the underlined dig	jit.		
<b>10.</b> 4 <u>8</u> 9 <b>11.</b> <u>7</u> ,493 .		<b>12.</b> 1,50 <u>6</u>	
Round each number to the nearest te	en.		
13. 47	<b>14.</b> 6,022		
Round each number to the nearest h	undred.		
<b>15</b> . 672	<b>16.</b> 3,940		
<b>17. Stretch Your Thinking</b> How many standard form of six hundred tho			

1-5 Name	Date	
Homework		
Compare using >, <, or =		
1. 57,068 _ 57,860	<b>2</b> . 24,516 24,165	
<b>3.</b> 154,424 () 145,424	<b>4</b> . 836,245 683,642	
<b>5</b> . 89,175	<b>6.</b> 100,000 (1,000,000	
Round to the nearest ten	thousand.	
<b>7</b> . 11,295	<b>8</b> . 82,964 <b>9</b> . 97,079	
Round to the nearest hun	dred thousand.	
<b>10.</b> 153,394	<b>11</b> . 410,188	
<b>12</b> . 960,013	<b>13</b> . 837,682	
Solve.		
<b>14</b> . What would 672,831 b	e rounded to the nearest:	
<b>a.</b> ten?		
<b>b.</b> hundred?		
<b>c.</b> thousand?		
d.ten thousand?		
e. hundred thousand?		
15. Compare the number 547,237 rounded to the nearest hundred thousand and 547,237 rounded to the nearest ten thousand. Which is the greater number? Write a comparison statement and explain your answer.		

1-5	Name		Date
Remembert	Ŋ		
Find the unknowr	n value in the number	sentence.	
<b>1.</b> 8 × <i>k</i> = 16	k =	<b>2.</b> <i>n</i> × 9 = 90	n =
<b>3.</b> 35 ÷ <i>t</i> = 5	t =	<b>4.</b> <i>p</i> ÷ 6 = 9	p =
Solve.			
depending on	ame, Nick can earn up which slot his coin go e six times, what is the could earn?	es through. If he	
Round each numb	per to the nearest thou	ısand.	
<b>6.</b> 2,950		<b>7.</b> 4,307	
Read and write ea	ach number in word fo	orm.	
<b>8</b> . 16,977			
<b>9</b> . 403,056			
same way that letters of <i>cat</i> a compare. Since first in a dictic first three digi each number.	<b>hinking</b> Leon says that the alphabetizes word and <i>cane</i> are the same, e <i>n</i> comes before <i>t</i> in to onary. To compare 64,1 its 641 are the same. T Since 9 is greater than n's way of thinking co	ls. For example, since he goes to the next he alphabet, the wo 98 with 641,532, he hen he compares the 5, the number 64,19	e the first two letter to rd <i>cane</i> comes knows that the e next digit in



Use the information in the table to answer the questions.

Driving Distances (in miles) between Various Cities in the United States

	New York, NY	Chicago, IL	Los Angeles, CA
Atlanta, GA	886	717	2,366
Dallas, TX	1,576	937	1,450
Nashville, TN	914	578	2,028
Omaha, NE	1,257	483	1,561
Seattle, WA	2,912	2,108	1,141
Wichita, KS	1,419	740	1,393

- 1. If you drive from New York to Dallas and then from Dallas to Chicago, how many miles would you drive?
- Which two cities are farther apart in driving distance: Seattle and Los Angeles or Wichita and New York? Use place value words to explain your answer.

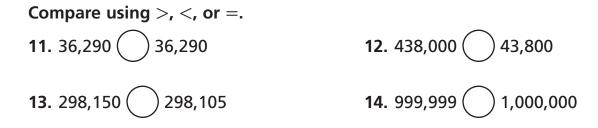
Use any method to add. On another sheet of paper, make a drawing for exercise 5 to show your new groups.

<b>3.</b> 1,389	<b>4.</b> 3,195	<b>5.</b> 1,165	<b>6.</b> 2,653
+ 5,876	+ 2,674	+ 7,341	+ 4,908
<b>7.</b> 3,692	<b>8.</b> 8,598	<b>9.</b> 4,295	<b>10</b> . 6,096
+ 7,543	+ 5,562	+ 8,416	+ 9,432

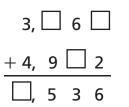
1-6 Name Remembering	Date
Multiply or divide.	
1. 81 ÷ 9 =	<b>2.</b> 7 × 4 =
<b>3.</b> 9 × 3 =	<b>4.</b> 24 ÷ 4 =
5. 7 <u>× 8</u>	6. 5 × 7
<b>7.</b> 10)80	<b>8.</b> 7)42

### Read and write each number in expanded form.

- 9. eighty-six thousand, nine hundred twenty-one
- 10. nine hundred twenty thousand, four hundred thirteen



**15. Stretch Your Thinking** Find the unknown digits in the following addition problem.



**2.** 94,280 + 56,173



**1.** 51,472 + 7,078

Copy each exercise, lining up the places	
correctly. Then add.	

<b>3.</b> 1,824 + 36,739	<b>4.</b> 372,608 + 51,625

**5.** 314,759 + 509,028 **6.** 614,702 + 339,808

**7.** 493,169 + 270,541 **8.** 168,739 + 94,035

The table shows the surface area of each of the Great Lakes.

Use the data in the table to help answer the following questions.

Lake	Surface Area (square miles)
Erie	9,906
Huron	22,973
Michigan	22,278
Ontario	7,340
Superior	31,700

**9.** Which is greater, the surface area of Lake Superior, or the sum of the surface areas of Lake Michigan and Lake Erie?

Show your work.

10. Which two lakes have a combined surface area of 30,313 square miles?

	Date
	<b>2.</b> 8 × 7 =
	<b>4.</b> 70 ÷ 7 =
	<b>4.</b> /0 ÷ / =
	<b>6.</b> 36 ÷ 6 =
	$\frown$
	<b>8</b> . 389,151 () 394,027
	<b>10.</b> 93,862 93,862
<b>12.</b> 3,893	<b>13.</b> 6,399
+ 5,245	+ 7,438
	<b>12.</b> 3,893 + 5,245

14. Stretch Your Thinking Peter adds 245,936 + 51,097 as follows. Explain his error. What is the correct sum?

 2
 4
 5,9
 3
 6

 +
 5
 1,0
 9
 7

 7
 5
 6,9
 0
 6

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1-8

Write a number sentence that shows an estimate of each answer. Then write the exact answer.

<b>1.</b> 69 +	25			
<b>2.</b> 259 +	- 43			
<b>3.</b> 2,009	+ 995			
<b>4.</b> 5	<b>5.</b> 38	<b>6.</b> 28	<b>7.</b> 243	<b>8.</b> 154
3	54	44	625	131
7	+ 52	32	+387	204
+ 4		+46		<u>+179</u>

## Solve.

Show your work.

 Paul's stamp collection includes 192 domestic and 811 foreign stamps.

About how many domestic and foreign stamps does Paul have altogether?

*Exactly* how many domestic and foreign stamps does Paul have altogether?

**10.** Plane A travels 102,495 miles. Plane B travels 91,378 miles. How many miles in all do the two planes travel?

Explain how you can use estimation to check that your answer is reasonable.

1-8 Rememberfr	Name	Date
What is 362,584 rc	ounded to the nearest:	
1. hundred?		<b>2.</b> thousand?
<b>3.</b> ten thousand?		<b>4.</b> hundred thousand?
Use any method to	o add.	
<b>5.</b> 2,938 + 4,271	<b>6.</b> 8,305 + 1,467	<b>7.</b> 8,074 + 3,552

Copy each exercise, lining up the places correctly. Then add.

**8.** 45,296 + 38,302 **9.** 293,017 + 58,226

10. Stretch Your Thinking Luanne estimates the sum of 39 + 15 is about 40 + 15, or 55. Jacob estimates the sum of 39 + 15 is about 40 + 20, or 60. Which estimate is closer to the exact sum? Explain.

1-9

# Subtract. Show your new groups.

1. 7,000	<b>2.</b> 9,632	<b>3.</b> 8,054
<u>- 3,264</u>	- 3,785	<u>– 1,867</u>
<b>4.</b> 4,000	<b>5.</b> 8,531	<b>6.</b> 8,006
<u>- 2,945</u>	<u>- 7,624</u>	<u>- 4,692</u>
<b>7.</b> 9,040	<b>8.</b> 6,000	<b>9.</b> 7,180
<u>- 5,712</u>	<u>- 5,036</u>	<u>- 4,385</u>
<b>10.</b> 6,478	<b>11.</b> 9,490	<b>12.</b> 5,000
<u>- 3,579</u>	<u>- 5,512</u>	<u>- 3,609</u>

## Solve.

Show your work.

- 13. A cross-country automobile rally is 1,025 kilometers long. At a stopping place, the leader had traveled 867 kilometers. How far away was the finish line?
- **14.** A census counted 5,407 people in Marina's home town. If 3,589 are males, how many are females?
- 15. A construction company is building a stone wall. The finished wall will contain 5,000 stones. So far, 1,487 stones have been placed. How many stones have not been placed?

Date

1-9 Name		Date
Remembering		
Use any method to add.		
<b>1.</b> 6,022	<b>2.</b> 4,586	<b>3.</b> 8,374
+ 1,988	+ 1,693	+ 3,707

The table shows the amount of litter collected from parks across a city on Earth Day each year. Use the data in the table to help answer the following questions.

- **4.** How much litter was collected altogether in 2007 and 2008?
- **5.** Which two years had a combined litter collection of 23,456 pounds?

	-
Year	Pounds of Litter
2007	8,293
2008	12,104
2009	15,877
2010	11,352

Write an equation that shows an estimate of each answer. Then write the exact answer.

**6.** 495 + 812 \_\_\_\_\_

**7.** 7,203 + 299 \_\_\_\_\_

8. 2,859 + 6,017 \_\_\_\_\_

9. Stretch Your Thinking Bridget ungrouped 5,000 as4 9 9 10shown. Use your understanding of place value to\$,000explain how the ungrouped number is equal to 5,000.-2,896

1-10	Name		Date
Homework			
Subtract. Then use Show your work.	e addition to check tl	he subtraction.	
<b>1</b> . 1,400 - 238 = _		<b>2.</b> 1,900 — 1,238 =	=
Check:		Check:	
<b>3.</b> 4,620 - 1,710 =	=	<b>4.</b> 5,243 — 2,454 =	=
Check:		Check:	
<b>5.</b> 3,142 - 1,261 =	=	<b>6.</b> 2,375 - 896 =	
Check:		Check:	
Solve.			Show your work.
The town librar	v has 1,058 books in it ry has 4,520 books in ks are there altogeth	its collection.	
library has and altogether. She	knows how many bo how many books bot wants to know how as. How can she use s wer?	th libraries have many books the	

1-10 <u>Name</u> Remembering		Date
Copy each exercise, lining up th	ne places correctly. Then a	add.
<b>1.</b> 32,418 + 508,182	<b>2.</b> 734,150 + 60	,382
Solve.		Show your work.
<ul> <li>3. The entire fourth grade is ma and 86 girls. <i>About</i> how man fourth grade altogether?</li> </ul>		Show your work.
<i>Exactly</i> how many students a fourth grade altogether?	re in the	_
Subtract. Show your new group	<b>DS</b> .	
<b>4</b> . 5,000 <b>5</b>	8,259 <b>6</b> . 3,716	2,081 — 1,733
7. Stretch Your Thinking What in this break-apart drawing? subtraction problems for the	List all the addition and	6,265

1-11	Name		Date
Homework			
Subtract.			
<b>1.</b> 71,824 — 36,739	<b>2.</b> 960,739 - 894,045	<b>3.</b> 665,717 — 82,824	<b>4.</b> 372,608 — 57,425
<b>5.</b> 597,603 <u>- 404,980</u>	<b>6.</b> 614,702 - 539,508	<b>7.</b> 724,359 – 99,068	<b>8.</b> 394,280 <u>- 56,473</u>

In an experiment, a scientist counted how many bacteria grew in several labeled dishes. The table shows how many bacteria were in each dish.

Dish	Number of Bacteria
А	682,169
В	694,154
С	57,026
D	150,895
E	207,121

## Solve. Estimate to check.

- **9.** What was the difference between the greatest number of bacteria and the least number of bacteria?
- **10.** How many more bacteria were in dish A than in dish D?
- **11.** How many fewer bacteria were in dish E than in the combined dish C and dish D?

Show your work.

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1-11 -	Name	Date
Rememberth	O	
Write an equation answer. Then write	that shows an estimate of e the exact answer.	each
<b>1.</b> 503 + 69		
<b>2.</b> 2,825 + 212		
<b>3.</b> 6,190 + 3,858		
Subtract. Show yo	ur new groups.	
<b>4.</b> 8,760	<b>5.</b> 6,000	<b>6.</b> 5,060
- 1,353	- 5,258	- 2,175
Subtract. Then use	addition to check the subtr	action. Show your work.
<b>7.</b> 6.355 - 891 =	<b></b>	26 - 1,425 =

Check: \_\_\_\_\_

**9. Stretch Your Thinking** Write an addition word problem in which the estimated sum is 14,000.

1-12	Name
Homework	
Solve each proble	m.
and 190 erasers	lering 249 pencils, 600 sheets of paper, . How many more sheets of paper than sers altogether is Mr. Chase ordering?

2. There were 623 people at the concert on Friday. On Saturday, 287 more people attended the concert than attended on Friday. How many people in all attended the concert on Friday and Saturday?

# Add or subtract.

<b>3.</b> 695	<b>4.</b> 8,452	<b>5.</b> 5,895
+ 487	— 5,938	+ 9,727
<b>6.</b> 49,527	<b>7.</b> 86,959	<b>8.</b> 39,458
— 26,088	— 38,486	+ 98,712
<b>9.</b> 286,329	<b>10.</b> 708,623	<b>11.</b> 952,774
+ 394,065	— 421,882	— 613,386

Date

Show your work.

1-12 Name		Date
Remembering		
Add or subtract.		
1. 7,982 <u>- 3,517</u>	<b>2.</b> 600,000 <u>- 399,410</u>	<b>3.</b> 138,925 + 47,316
Subtract. Then use addition	on to check the subtractio	on. Show your work.
<b>4</b> . 4,652 -1,593 =	<b>5.</b> 30,000 - 26,931 =	<b>6.</b> 896,581 - 355,274 =
Check:	Check:	Check:
Subtract.		
<b>7.</b> 731,285 - 369,114 =	<b>8.</b> 645,803	8 - 52,196 =
<b>9. Stretch Your Thinking</b> which the answer is 130		in



# Add or subtract.

**1**. 12,673 - 9,717 = \_\_\_\_ **2**. 8,406 + 45,286 = \_\_\_\_ **3**. 2,601 - 1,437 = \_\_\_\_

Answer each question about the information in the table.

Country	Area (square miles)
Belize	8,867
Costa Rica	19,730
El Salvador	8,124
Guatemala	42,042
Honduras	43,278
Nicaragua	49,998
Panama	30,193

Area of the Countries of Central America

4. What is the total area of Guatemala and Honduras?

Show your work.

- **5.** Which two countries have the least area? What is the sum of their areas?
- **6.** Which is greater: the area of Nicaragua or the total area of Costa Rica and Panama?
- **7.** How much greater is the area of Honduras than the area of Guatemala?

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Problem Solving with Greater Numbers

١a	ame	e

Subtract. Then use addition to check the subtraction.

**1.** 1,500 - 705 = \_\_\_\_ **2.** 9,523 - 8,756 = \_\_\_\_

Check: \_\_\_\_\_

The table shows how many fans attended a team's baseball games at the start of the season. Solve. Estimate to check.

- **3.** How many fewer people attended Game 4 than Game 5?
- **4.** What was the difference between the greatest number of fans and the least number at a game?

Add or subtract.

<b>5.</b> 7,452	<b>6.</b> 2,155	<b>7.</b> 293,635
+ 3,801	+ 5,890	- 178,098

8. Stretch Your Thinking The equation 32,904 + m = 61,381shows that the number of females plus the number of males, *m*, living in a certain city equals the total population. Write a subtraction equation that represents the same situation. How many males live in this city?

Game	Fans
1	68,391
2	42,908
3	9,926
4	35,317
5	46,198

Check: \_\_\_\_\_

1-13

Remembering



Companies often use bar graphs to present information to the media or stockholders. Data may show how attendance or profits vary at different times of the year, or compare the successes of different divisions or quarters of the year.

**1.** Research attendance numbers for your favorite amusement park, sporting team, or movie during five different periods of time. Complete the table with your information.

2. Use the grid below to graph the data in your table.



1-14 Nam	e	Date
Remembering		
Subtract.		
<b>1.</b> 958,299 - 63,419 = _		<b>2.</b> 9,523 - 8,756 =
Add or subtract.		
<b>3.</b> 5,191	<b>4.</b> 13,687	<b>5.</b> 758,194
+ 273	+ 25,137	- 6.029

## Answer each question about the information in the table.

- **6.** What is the total number of miles the trucker drove in the last 2 years?
- Which is greater, the increase in miles driven between 1998 and 1999 or between 1999 and 2000? What is that increase?

#### Miles Driven by a Trucker

Year	Miles
1998	75,288
1999	117,391
2000	126,304
2001	87,192
2002	94,386

8. Stretch Your Thinking Look at the trucking data in the table for Exercises 6 and 7. How would you round the data to make a bar graph? What scale would you use?





# **1.** Label the sides of each rectangle.

:	a.	_	•				_ k	)	•		•	•	•	•		'		Ċ		•	:	•	•		•	d.		•	•	
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2.	<ul> <li>2. Write the equation representing the area of each rectangle shown above.</li> <li>a b c</li> </ul>																													
	d	• -										e.										f.							-	
Fi	Find the area (in square units) of a rectangle with the given dimensions.																													
3.	3	×	5	5					_		4.	3	× !	50						-	5	. 3	0 >	× 5	5_					

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2-1 Name	Date
Remembering	
Read and write each number in expande	d form.
<b>1.</b> 71	<b>2.</b> 298
<b>3.</b> 5,627	<b>4.</b> 3,054
Read and write each number in standard	l form.
<b>5.</b> 500 + 80 + 3	<b>6.</b> 9,000 + 200 + 40 + 1
<b>7.</b> eight hundred seventeen	<b>8.</b> one thousand, six hundred forty-six
Read and write each number in word for	 rm.
<b>9.</b> 90 + 7	
<b>10.</b> 300 + 10 + 2	
<b>11.</b> 4,000 + 100 + 80 + 5	
<b>12.</b> 8,000 + 700 + 6	
<b>13. Stretch Your Thinking</b> Emmy planted backyard garden, giving each bulb or space. She arranged the onion bulbs array of 4 rows with 5 in each row. M Emmy's onion patch. How many onio	ne square foot of in a rectangular Iake a sketch of
plant? What is the area of the onion	
three other rectangular arrangement	-
have used to plant these onion bulbs	

2-2	Name		Date
Homework			
000000000000000000000000000000000000000			
Solve each proble	em.		
1. 10 ×	= 3 tens	<b>2.</b> 10 $\times$ 6 tens =	

# Follow the directions.

- 3. Divide the 30  $\times$  40 rectangle into 10-by-10 squares
  - of 100 to help find the area.

. . . . . . . 4. Complete the steps to factor the tens. 30 × 40 = (\_\_\_\_\_ × 10) × (\_\_\_\_\_ × 10) = (\_\_\_\_\_\_ × \_\_\_\_\_) × (10 × 10) = \_\_\_\_\_ × 100 =

5. What is the area of the 30 imes 40 rectangle, in square units?

2-2 Name		Date							
Remembering									
Write the number of thou hundreds in each number	isands and the number of								
<b>1.</b> 4,672	<b>2</b> . 1,023	<b>3.</b> 610							
thousands	thousands	thousands							
hundreds	hundreds	hundreds							
Read and write each num	ber in expanded form.								
4. twenty-five thousand,	three hundred fifty-one								
<b>5.</b> five hundred six thous	5. five hundred six thousand, five hundred ninety-eight								
<b>6.</b> nine hundred thirteen	<b>6.</b> nine hundred thirteen thousand, eight hundred twenty-seven								
Find the area (in square u the given dimensions.	nits) of a rectangle with								
7. 4 × 6	<b>8.</b> 4 × 60								
<b>9.</b> 9 × 2	<b>10.</b> 90 × 2 .								
<b>11.</b> 3 × 7	<b>12.</b> 70 × 3								
<b>13. Stretch Your Thinking</b> multiply 90 $\times$ 30.	Li is using place value to								
$90 \times 30 = (9 \times 10) \times$ = $(9 \times 3) \times (9 \times 10) \times$ = $27 \times 10$ = $270$									
Is Li's answer correct?	Explain.								

Find each product by factoring the tens. Draw rectangles if you need to.

<b>1.</b> 6 × 2, 6 × 20, and 6 × 200	<b>2.</b> 4 $\times$ 8, 4 $\times$ 80, and 4 $\times$ 800
<b>3.</b> 5 × 5, 5 × 50, and 5 × 500	<b>4.</b> 5 × 9, 50 × 9, and 500 × 9
<b>5.</b> $6 \times 5$ , $60 \times 5$ , and $60 \times 50$	<b>6.</b> 7 × 6, 70 × 6, and 70 × 60

On a sheet of grid paper, draw two different arrays of connected squares for each total. Label the sides and write the multiplication equation for each of your arrays.

# 7. 18 squares

2-3

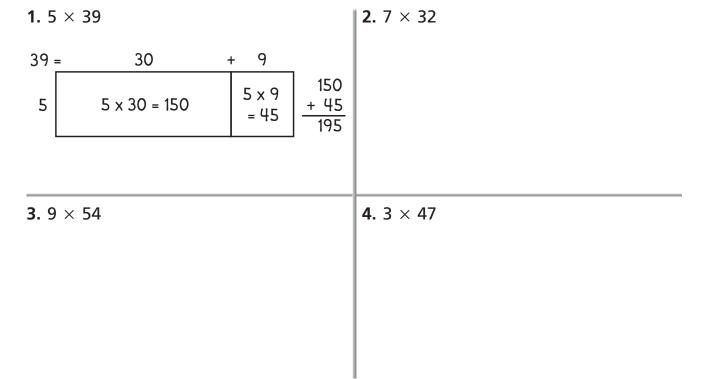
Homework

# 8. 20 squares

# **9.** 24 squares

2-3 Name		Date						
Remembering								
Add or subtract.								
1. 2,728 + 7,245	<b>2.</b> 83,054 + 1,496	<b>3.</b> 27,300 <u>- 9,638</u>						
Use any method to add.								
<b>4.</b> 4,335 <b>5.</b> + 2,694 +	3,806     6.     6,401       - 8,129     + 7,763	<b>7.</b> 9,826 + 8,531						
Solve each problem.								
<b>8.</b> 10 × =	6 tens 9. 10 × 9 = _							
<b>10.</b> × 10 =	2 tens 11	× 10 = 5 tens						
<b>12.</b> 10 × 4 tens =	<b>13.</b> 10 ×	= 7 hundreds						
<b>14.</b> 10 × =	8 tens 15	$\times 10 = 3 \text{ tens}$						
and 60 $ imes$ 50 both hav	Lucas says that since $40 \times 70$ e factors with a total of two have products with a total of ct? Explain.							

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# Solve each problem.

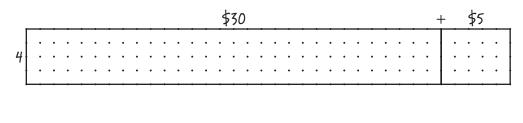
- Show your work.
- 5. Maria's flower garden is 14 feet long and 3 feet wide. How many square feet is her garden?
- 6. Maria planted 15 trays of flowers. Each tray had 6 flowers in it. How many flowers did she plant?
- 7. Write and solve a multiplication word problem about your family.

Model One-Digit by Two-Digit Multiplication **35** 

Homework

2-4	Name	Date					
Rememberi	Ŋ						
Round each numb	per to the nearest	hundred.					
1. 283	<b>2.</b> 729 .	<b>3.</b> 954					
Round each numb	per to the nearest	thousand.					
<b>4.</b> 4,092	<b>5.</b> 6,550	<b>6.</b> 5,381					
Compare using >,	, <, or =.						
<b>7.</b> 92,800	92,830	<b>8.</b> 165,000 156,000					
<b>9.</b> 478,390	478,390	<b>10.</b> 736,218 89,479					
Find each product by factoring the tens. Draw rectangles if you need to.							
<b>11.</b> 3 × 2, 3 × 20,	and 3 $ imes$ 200	<b>12.</b> 7 $ imes$ 3, 7 $ imes$ 30, and 7 $ imes$ 300					

13. Stretch Your Thinking Write a word problem that could be solved using the rectangle model shown. Then solve the problem by finding the tens product, the ones product, and the total product.



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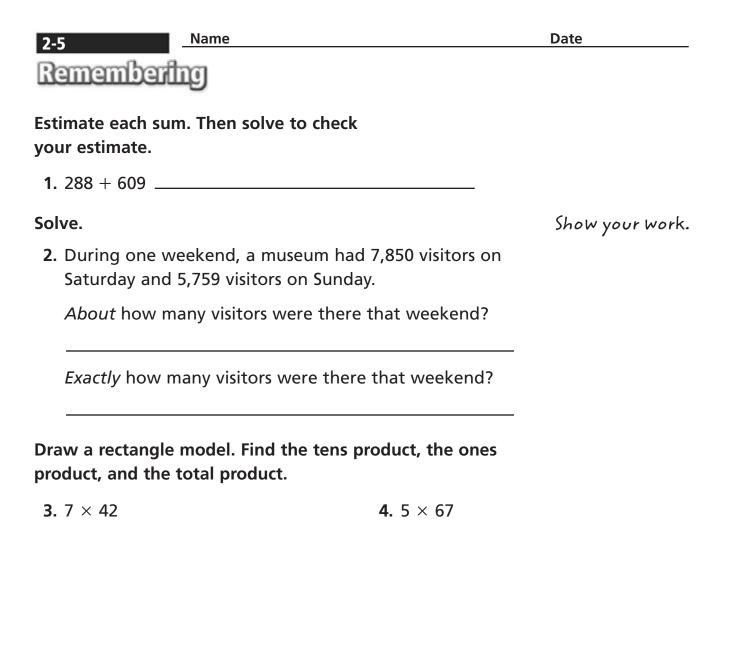
## Homework

2-5

Estimate each product. Solve to check your estimate.

1.	4 × 26	<b>2.</b> 5 × 63	3.	7 × 95
4.	4 × 84	<b>5.</b> 2 × 92	6. 1	3 × 76
Esti	mate the answers.	Then solve each prob	lem.	Show your work.
7.	There are 65 teams	is participating in a cy s registered for the evo tal of 8 cyclists. How r the event?	ent.	
8.	There are 9 costum	is making costumes for ne changes for each of es does the theater gr	the 23 perform	ners.
9.	display case. The li	nows 6 different book brary is open 27 days i does the library need f	in one month.	
Wri	te and solve a mul	tiplication word probl	em.	
10.				

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5. Stretch Your Thinking Marcia says she can use *rounding* to find the *exact* product of  $6 \times 75$ . She says that since 75 is halfway between 7 tens and 8 tens, the exact product of  $6 \times 75$  must be halfway between  $6 \times 70$  and  $6 \times 80$ . Is she correct? Explain.

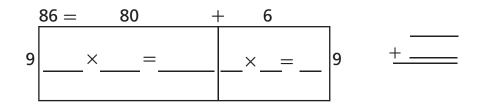


Use the Place Value Sections Method to solve the problem. Complete the steps.

1. 9 × 86 \_\_\_\_\_

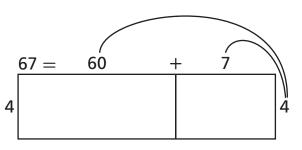
Homework

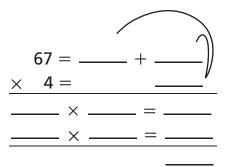
2-6



Use the Expanded Notation Method to solve the problem. Complete the steps.

**2.** 4 × 67 \_\_\_\_\_





Use any method to solve. Draw a rectangular model to represent the problem.

**3.** Natalia read her new book for 45 minutes each day for one week. How many minutes did she read after 7 days?

Show your work.

The table shows the approximate height of the world's five tallest mountain peaks. Use the data in the table to help answer the following questions.

mountain peaks combined? combined are 56,190 feet tall? **5.** 5 × 39 **6.** 6 × 64 **7.** 9 × 23 **8.** 7 × 48 рту

**1.** How tall are the two tallest

2. Which two mountain peaks

Mountain	Height (in feet)
Everest	29,035
K2	28,250
Kangchenjunga	28,169
Lhotse	27,940
Makalu	27,766

Subtract.

2-6

Remembering

**3.** 586,720 - 293,415 = \_\_\_\_\_ **4.** 917,336 - 904,582 = \_\_\_\_\_

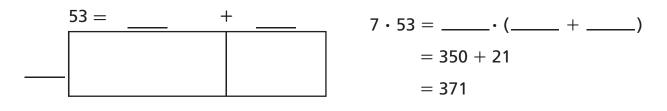
Estimate each product. Solve to check your estimate.

9.	Stretch Your Thinking Explain how the Expanded
	Notation Method is used to multiply 82 $ imes$ 3.

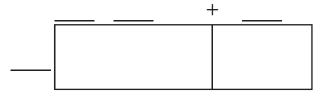


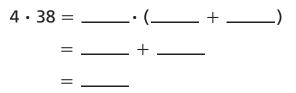
Use the Algebraic Notation Method to solve each problem. Complete the steps.

**1.** 7 · 53 \_\_\_\_\_



**2.** 4 · 38 \_\_\_\_\_





Date

Draw an area model and use the Algebraic Notation Method to solve the problem. Show your work.

3. Mr. Henderson needs to get plywood to build his flatbed trailer. The flatbed is 8 feet by 45 feet. What is the area of the flatbed Mr. Henderson needs to cover with plywood?

2-7	Name	Date		
Remembering				
Subtract. Show your new groups.				
<b>1.</b> 4,000	<b>2</b> . 8,441	<b>3.</b> 9,340		
- 1,946	- 7,395	- 8,614		
<b>4.</b> 1,587	<b>5.</b> 6,193	<b>6.</b> 4,006		
- 1,200	<u> </u>	<u> </u>		

Use the Expanded Notation Method to solve the problem. Complete the steps.

**7.** 5 × 68 \_\_\_\_\_

8. Stretch Your Thinking Jenna made 6 bracelets using 32 beads each. Kayla made 7 bracelets using 29 beads each. Who used more beads? Use the Distributive Property to solve the problem.

2-8	Name	Date		
Homework				
Use any method to solve. Sketch a rectangle model, if you need to.				
<b>1.</b> 7 × 62	<b>2.</b> 6 × 63	<b>3.</b> 6 × 82		
<b>4.</b> 57 × 7	<b>5.</b> 5 × 76	<b>6.</b> 4 × 65		
<b>7.</b> 7 × 83	<b>8.</b> 36 × 9	<b>9.</b> 27 × 8		

#### Solve each problem.

- **10.** 94 people are sitting down to a fancy six-course meal. The first course is soup, which only needs a spoon. The rest of the courses each need fresh forks. How many forks will be used?
- 11. Leo uses plastic letters to make signs. A chain store asks Leo to put signs in front of their 63 stores that say "SALE: HALF PRICE ON ALL DRESSES." How many plastic "S" letters will Leo need?

Show your work.

2-8 Name	Date		
Remembering			
Subtract. Then use addition to check the Show your work.	e subtraction.		
<b>1.</b> 6,459 - 921 =	<b>2.</b> 5,603 - 3,284 =		
Check:	Check:		
<b>3.</b> 7,863 – 2,734 =	<b>4.</b> 9.582 - 1.447 =		
Check:	Check:		
Use the Algebraic Notation Method to solve each problem.			
Complete the steps.			
<b>5.</b> 4 • 93	<b>6</b> . 3 · 78		

7. Stretch Your Thinking Xander says that the Place Value Sections Method, the Expanded Notation Method, and the Algebraic Notation Method of multiplying a one-digit number by a two-digit number are pretty much the same. Do you agree or disagree? Explain. Solve, using any numerical method. Use rounding and estimating to see if your answer makes sense.

1. 35	<b>2.</b> 79	<b>3.</b> 56	<b>4</b> . 94
<u>× 9</u>	× 5	<u>× 3</u>	<u>× 2</u>
5. 68	6. 27	7. 82	<b>8.</b> 43
<u>× 4</u>	<u>× 8</u>	<u>× 6</u>	<u>× 7</u>

Solve each problem.

2-9

Homework

Show your work.

**9.** Describe how you solved one of the exercises above. Write at least two sentences.

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- **10.** Mariko wrote the full alphabet (26 letters) 9 times. How many letters did she write?
- **11.** Alan has 17 packs of bulletin-board cutouts. Each one contains 9 shapes. How many shapes does he have altogether?

2-9 Nar	me	Date		
Remembering				
Add or subtract.				
<b>1.</b> 6,095	<b>2.</b> 53,894	<b>3.</b> 629,137		
+ 2,382	- 12,914	- 508,978		
Solve each problem.		Show your work.		
<ul> <li>4. During the first half of a college basketball game, 24,196 people entered the athletic center. During the second half, 2,914 people left and 4,819 people entered. How many people were in the athletic center at the end of the game?</li> </ul>				
5. Miles had three sets of building blocks. His first set had 491 pieces. His second set had 624 pieces. Miles combined his three sets for a total of 1,374 pieces. How many pieces had been in his third set?				
Use any method to solve. Sketch a rectangle model if you need to.				
<b>6.</b> 6 × 23	7. 8 × 44	<b>8.</b> 3 × 95		
38 books each and	<b>ng</b> A bookcase has 3 she 4 shelves with 29 books o the bookcase? Use any m ork.	each. How		

2-10 Name		Date	
Homework			
Sketch rectangles and solve by any relates to your sketch.	method that		
1. 3 × 687	<b>2.</b> 8 × 572	-	
<b>3.</b> 5 × 919	<b>4.</b> 6 × 458	-	
<b>5.</b> A parking garage charges \$5 per	vehicle to park	Show your work.	
The garage has 327 spaces for vehicles. If the garage is full, how much money does garage make?			
C. Cusie/a con con chout 242 mile			
6. Susie's car can go about 342 miles on one tank of gasoline. She has filled her tank 4 times this month. About how many miles did Susie travel this month?			
<ol> <li>Zach filled his albums with 134 pages of trading cards. Each page holds 9 trading cards. How many</li> </ol>			
trading cards does Zach have in h	nis albums?		
<b>8.</b> Write and solve a multiplication v a three-digit number.	word problem involving		

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Answer each question about the information in the table.

1. What is the combined population of Midborough and Bigville?

2-10

Remembering

2. How many more people live in Superburg than in Smalltown?

Population of Five Cities		
Smalltown	38,346	
Midborough	49,725	
Centervale	79,086	
Bigville	123,267	
Superburg	184,903	

Use any method to solve. Sketch a rectangle model, if	
you need to.	

**3.**  $3 \times 91 =$  \_\_\_\_\_ **4.**  $7 \times 65 =$  \_\_\_\_\_ **5.**  $6 \times 84 =$  \_\_\_\_\_

Solve using any numerical method. Use rounding and estimating to see if your answer makes sense.

<b>6.</b> 45	<b>7.</b> 28	<b>8.</b> 81	<b>9.</b> 56
<u>× 7</u>	<u>× 9</u>	<u>× 7</u>	<u>× 3</u>

- **10. Stretch Your Thinking** Whether using the Place Value Sections Method, the Expanded Notation Method, or the Algebraic Notation Method, the same basic steps can be used to multiply a one-digit number by a three-digit number. Put these steps in order by numbering 1 through 3.
  - \_\_\_\_\_ Add the partial products.
  - \_\_\_\_\_ Write the three-digit number in expanded form.
  - \_\_\_\_\_ Multiply the one-digit number by each of the values in expanded form.



Cross out the extra numerical information and solve.

- **1.** A gymnastic meet is 2 hours long. It has 8 competitors and each competes in 4 events. How many events will be scored?
- George makes \$20 doing lawn work for 4 hours each week. He wants to buy a \$2,500 used car from his grandmother. He has been saving this money for 30 weeks. How much has he saved?

### Tell what additional information is needed to solve the problem.

- **3.** Michelle is saving \$20 each week for the bike of her dreams. How long until she can purchase her bike?
- **4.** A teacher sees a sale on packages of pencils. She wants to give each of her students a pencil. How many packages should she buy?

Solve each problem and label your answer. Write hidden questions if you need to.

- **5.** There are 18 windows on each side of a rectangular building. It takes the window washer 3 minutes to wash each window. How many minutes will it take to finish the job?
- 6. The school office prints a newsletter every month that uses 2 pieces of paper. They make 35 copies for each room. How many pieces of paper do they need to print copies for 10 rooms?

2-11	Name		Date
Remembert	IJ		
Add or subtract.			
1. 5,900 — 1,386	2.	54,371 + 12,703	<b>3.</b> 800,000 - 753,192
Solve using any numerical method. Use rounding and estimating to check your work.			

<b>4.</b> 83	<b>5.</b> 36	<b>6.</b> 94	<b>7.</b> 44
× 5	<u>× 2</u>	<u>× 6</u>	× 8

Draw a rectangle model. Solve using any method that relates to the model.

**10. Stretch Your Thinking** Write a word problem that involves multiplication and addition. Include extra numerical information. Solve the problem, showing your work.

2-12

Homework

Sketch an area model for each exercise. Then find the product.

1. 74 × 92	<b>2.</b> 65 × 37
<b>3.</b> 55 × 84	<b>4.</b> 49 × 63
<b>5.</b> 34 × 52	<b>6.</b> 24 × 91

7. Write a word problem for one exercise above.

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2-12 Name	Date		
Remembering			
What is 851,632 rounded to the nearest:			
<b>1.</b> hundred?	<b>2.</b> thousand?		
3. ten thousand?	4. hundred thousand?		
Compare using >, <, or =.			
<b>5.</b> 58,320 58,320	<b>6.</b> 642,810 64,281		
7. 427,900 428,000	8. 71,253 409,135		
Draw a rectangle model. Solve using any method that relates to the model.			

#### Tell what additional information is needed to solve the problem.

- **11.** Rosalina knitted 8 scarves for gifts. She used 38 feet of yarn for each scarf. How much did Rosalina spend on the yarn?
- 12. Stretch Your Thinking How many smaller rectangles are there in an area model that represents  $27 \times 83$ ? Why? What are their dimensions?

\_\_\_\_\_

UNIT 2 LESSON 13

\_\_\_\_\_\_ Mr. Gomez's class is learning about multiplication. The

Multiply using any method. If you use an area model to

**2.** 88 × 29

class wants to see what multiplications they can find in their school. Solve each problem.
5. The class counts 37 tiles across the 6. The back

- 5. The class counts 37 tiles across the front of their room and 64 tiles down one side. How many floor tiles are in their classroom?
- 7. In the school, there are
  3 classrooms for each grade:
  kindergarten, 1, 2, 3, 4, 5, and
  6. Each classroom has 32 lockers.
  How many lockers are there in the school building?

9.\_\_\_\_\_

6. The back of their classroom is a brick wall. Down one side, they count 26 rows of bricks. Across the bottom, they count 29 bricks. How many bricks make up the wall?

**3**. 74 × 57

8. The school auditorium has 69 rows of seats. Each row has 48 seats across. If 6,000 people want to see the school talent show, how many times do the students have to do the show?

10. \_\_\_\_\_

Different Methods for Two-Digit Multiplication 53

Write two multiplication word problems of your own. Then solve each problem. **4**. 84 × 68

multiply, show your sketch.

Homework

**1**. 45 × 79

2-13

2-13	Name	Date
Rememberi	ng	
Estimate each sun your estimate.	n. Then solve to check	
<b>1.</b> 289 + 503		
<b>2.</b> 4,199 + 684		
<b>3.</b> 8,128 + 895		
Cross out the ext	ra numerical information and solve.	Show your work.
party. Each bat	ing 4 batches of muffins for her drama ch requires 2 cups of flour and makes w many muffins will Marlene have	
•	atteries costs \$6 and contains 9 batteries. 3 packs of batteries. How much did n batteries?	
Sketch an area me	odel for each exercise. Then find the prod	uct.
<b>6.</b> 54 × 38	<b>7.</b> 49 × 75	
	<b>ninking</b> Jackson used the Shortcut tiply 84 $\times$ 37. Did he do it correctly?	$\begin{array}{c} \text{1}\\ \text{2}\\ \text{84}\\ \times \frac{37}{588}\\ \end{array}$
Explain.		1
		84 shing o
		588 company
		<u>+ 252</u> 840

2-14

Homework

Solve each multiplication problem using any method. Use rounding and estimation to check your work.

<b>1.</b> 45 × 61	<b>2.</b> 24 × 56	<b>3.</b> 83 × 27	<b>4.</b> 39 × 48
<b>5.</b> 36 × 96	<b>6.</b> 63 × 87	<b>7.</b> 58 × 79	<b>8.</b> 15 × 92
0 22 × 42	<b>10</b> 70 × 20	<b>11</b> CO × CO	
9. 33 × 43	10. 76 × 29	11. 69 × 63	1 <b>2.</b> 04 × 25

<b>2-14</b> Name	Date
Remembering	
Subtract. Then use addition to c Show your work.	heck the subtraction.
<b>1.</b> 8,960 - 1,238 =	<b>2.</b> 5,418 - 5,269 =
Check:	Check:
Sketch an area model for each e	exercise. Then find the product.
<b>3.</b> 28 × 94	<b>4.</b> 63 × 88
Use any method to solve. Sketcl you need to. 5. 66 × 24 6. 27	h an area model if 7 × 83 7. 79 × 35
8. Stretch Your Thinking Kia is p information. There are 23 pag she needs enough copies for 1 package of paper contains 20 she needs 5 packages of pape Will she have enough paper?	ges in a packet, and 52 people. Each 0 sheets. She estimates er to print the packets.

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2-15	Name		Date
Homework			
Solve using any n Check your work	nethod and show yo with estimation.	ur work.	
<b>1.</b> 55 × 64	<b>2</b> . 42 × 67	<b>3.</b> 59 × 32	<b>4.</b> 78 × 44
<b>5.</b> 62 × 23	<b>6.</b> 53 × 28	<b>7</b> . 71 × 35	<b>8.</b> 22 × 66

Solve.

Show your work.

- 9. Keesha walks 12 blocks to school every day. One day, she counts 88 sidewalk squares in one block. If each block has the same number of sidewalk squares, how many squares does Keesha walk on as she walks to and from school each day?
- 10. The Card Collector's Club is having a meeting. Each member brings 25 sports cards to show and trade. If 35 members attend, how many cards do they bring altogether?
- **11.** On a separate sheet of paper, write and solve your own multiplication word problem.

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2-15	Name		Date
Remembert	ng		
Add or subtract.			
1. 4,659 + 2,047	<b>2</b> . 9,38 + 1,59		<b>3.</b> 248,266 — 147,852
Use any method t you need to.	o solve. Sketch an a	area model if	
<b>4.</b> 26 × 18	<b>5.</b> 35 × 64	<b>6.</b> 82 × 73	<b>7.</b> 91 × 23
Solve using any mestimation to chee	nethod. Use roundin ck your work.	ig and	
<b>8.</b> 17 × 44	<b>9.</b> 62 × 74	<b>10.</b> 53 × 89	<b>11.</b> 32 × 96
12. Stretch Your T	<b>hinking</b> Greyson is	 planning to lay a	brick
•	h will be made up o ill also lay a backyar		

12. Stretch Your Thinking Greyson is planning to lay a brick driveway which will be made up of 84 rows of 14 bricks per row. He will also lay a backyard patio with 25 rows of 31 bricks per row. How many pallets of bricks should Greyson order if each pallet has 1,000 bricks? Show your work. Sketch a rectangle for each problem and solve using any method that relates to your sketch.

**1.** 8 × 6,000 **2.** 6 × 3,542

**3.** 7 × 3,124

2-16

Homework

**4.** 5 × 7,864

5. A school is participating in a pull tab program to raise money for a local organization. The school puts 1,295 pull tabs in each bag. The school has 7 bags of pull tabs. How many pull tabs has the school collected?

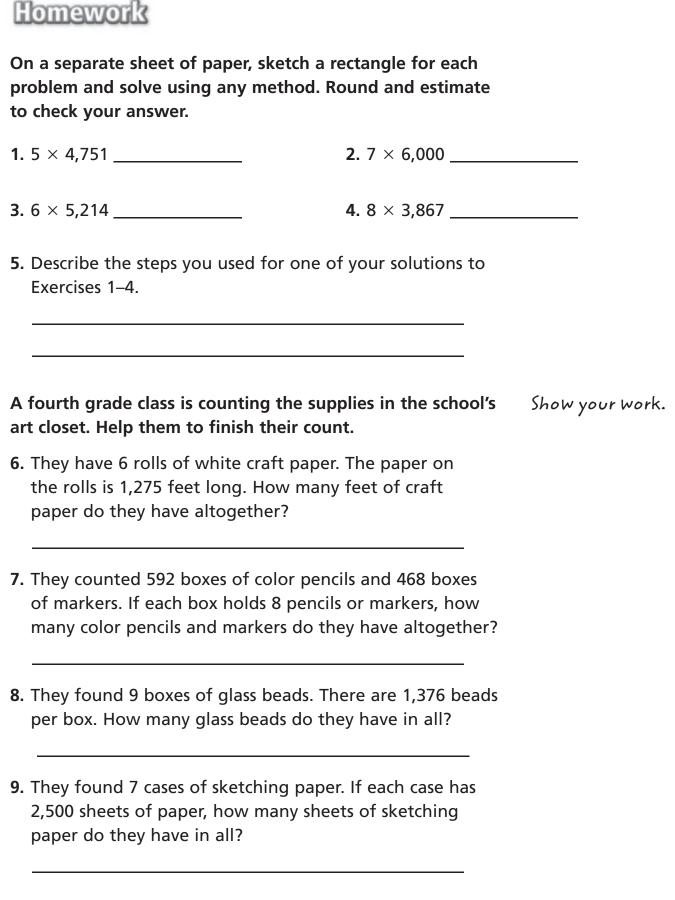
- **6.** A dance company has scheduled 4 performances at a theater. The theater has 2,763 seats. Every ticket has been sold for each of the performances. How many tickets were sold in all?
- **7.** An amusement park has about 3,600 visitors each day. About how many visitors does the amusement park have in one week?

Show your work

2-16	lame		Date
Remembering	IJ		
Add or subtract.			
<b>1.</b> 23,152 <u>- 10,894</u>	<b>2</b> . 308,0 <u>- 175,2</u>		827,381 + 154,338
Solve each multiplic rounding and estim	•	• •	
<b>4.</b> 21 × 36	<b>5.</b> 48 × 16	<b>6.</b> 53 × 99	<b>7.</b> 64 × 72
Solve using any me work with estimation	•	ur work. Check your	
<b>8.</b> 45 × 91	<b>9.</b> 26 × 33	<b>10.</b> 47 × 52	<b>11.</b> 87 × 14

**12. Stretch Your Thinking** Lily says that  $4 \times 7,000$  has the same product as  $7 \times 4,000$ . Is she correct? Explain using the Associative Property of Multiplication.

2-17



Name	Date
hg	
-	
<b>2</b> 53 742	<b>3.</b> 400,000
+ 93,587	<u> </u>
	Show your work.
18 sheets of stickers for her st tained 32 stickers. How many her sticker album?	
model. Solve using any meth del.	nod that
<b>6.</b> 7 >	× 1,578
hinking Zoe rounded 6 × 8,49 frew rounded 6 × 8,493 to 6 × an estimate closer to the actu- now? Explain another way to would give a better estimate	× 9,000. ual product? estimate
	2. 53,742 <u>+ 93,587</u> 18 sheets of stickers for her stained 32 stickers. How many her sticker album?  model. Solve using any methodel.  6. 7 sticker album  inking Zoe rounded 6 × 8,49  rew rounded 6 × 8,493 to 6 statement of the action of the sticker album?

# Homework

2-18

Solve using any method and show your work. Check your work with estimation.

<b>1.</b> 6 × 88	<b>2.</b> 62 × 32	<b>3.</b> 3 × 3,719
<b>4.</b> 63	<b>5.</b> 523	<b>6.</b> 39
$\times$ 4	$\times$ 8	<u>×19</u>
<b>7.</b> 84	<b>8.</b> 2,858	<b>9.</b> 541
× 47	<u>× 9</u>	<u>× 6</u>

#### Solve.

- 10. Mr. Jackson goes on vacation for 22 days. He pays \$17 each day he is gone for Holly's Home Service to get the mail, walk the dog, and water the plants. How much does Mr. Jackson pay Holly's Home Service for the time he is on vacation?
- **11.** A contractor needs to know the area of a sidewalk that is 2,381 feet long and 7 feet wide. What is the area of the sidewalk?

2-18	Name		Date	
Remembert	hg			
Add or subtract.				
<b>1.</b> 38,560	<b>2.</b> 272,311	3.	815,007	
+ 16,429	<u> </u>	+	174,399	
Draw a rectangle relates to the mo	model. Solve using any del.	method that		
<b>4.</b> 9 × 4,572	5	. 4 × 8,386		
A grocery store c	erk is ordering produce f	or the month.		
Help him find how are in his order.	w many snap peas and g	arlic bulbs	Show your work.	
	tos of spap page. Fach sr	ata contains		
	ites of snap peas. Each cra s. How many snap peas is			
	xes of garlic bulbs. Each ł garlic. How many garlic k			
he ordering?	5			
				© Hought
	ninking A videographer e he records and \$18 for e			on Mifflii
	s customers order. How n			n Harco
	grapher earn in a summe	-		urt Publ
Show your wo	videos and has 87 orders t rk	for extra copies?		ishing (
				Houghton Mifflin Harcourt Publishing Company
				×

Practice Multiplying

### 2-19 Homework

Solve using any method and show your work. Check your work with estimation.

<b>1.</b> 3 × 45	<b>2.</b> 32 × 82	<b>3.</b> 9 × 2,477
4. 86	<b>5.</b> 419	<b>6.</b> 76
$\times 4$	$\times 6$	$\times 39$
<b>7</b> . 23	<b>8.</b> 6,965	<b>9.</b> 746
<u>× 95</u>	$\times$ 8	<u>× 5</u>

#### Solve.

- 10. Simon makes an array that is 47 units wide and33 units long. What is the area of Simon's array?
- 11. A farmer plants vegetables in rows. He plants36 rows of carrots with 13 carrot seeds in eachrow. How many carrot seeds did the farmer plant?

2-19 Name	Date	
Remembering		
Add or subtract.		
<b>1.</b> 563,902 <b>2.</b> 327,7 - 153,884 - 123,9	-	
Sketch a rectangle model and solve us Round and estimate to check your ans		
<b>4.</b> 6 × 3,916	<b>5.</b> 7 × 2,843	
Solve using any method and show yo	ur work. Check your	
work with estimation.		
<b>6.</b> 7 × 43 <b>7.</b> 48 × 2	6 8. 4,715 × 3	
9.       62       10.       849 $\times$ 91 $\times$ 6	11. 5,293 <u>× 4</u>	

12. Stretch Your Thinking LaDonne has a budget of \$240 for new school clothes. She needs at least two new shirts, two new pairs of pants, and one new pair of shoes. The shirts cost \$18 each. The pants cost \$32 each. The shoes cost \$49 per pair. Plan two different combinations of numbers of shirts, pants, and shoes that LaDonne could buy within her budget. What is the total cost for each buying plan?

3-1	Name	Date
Homework		
Divide with rema	inders.	
<b>1.</b> 5)29	<b>2.</b> 8)34	<b>3.</b> 9)75
<b>4.</b> 2)13	<b>5.</b> 4)39	<b>6.</b> 4)30
<b>7.</b> 7)45	<b>8.</b> 6)38	<b>9.</b> 5)39
<b>10.</b> 3)25	<b>11.</b> 4)31	<b>12.</b> 9)35
<b>13.</b> 4)27	<b>14.</b> 8)29	<b>15.</b> 7)22
<b>16.</b> 3)26	<b>17.</b> 6)37	<b>18.</b> 8)42

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3-1 Name		Date
Remembering		
Write the number of thous hundreds in each number.	ands and the number of	
<b>1.</b> 4,128	<b>2.</b> 8,395	<b>3.</b> 612
thousands	thousands	thousands
hundreds	hundreds	hundreds
Read and write each numb	per in expanded form.	
<b>4.</b> 94	<b>5.</b> 752	
<b>6.</b> 3,576	<b></b>	
Read and write each numb	oer in standard form.	
<b>8.</b> 200 + 30 + 7	<b>9.</b> 5,000 + 8	800 + 60
<b>10.</b> four hundred sixty-thre	ee <b>11.</b> eight tho	ousand, one hundred ten
Find the area (in square un the given dimensions.	nits) of a rectangle with	
<b>12.</b> 5 × 7	<b>13.</b> 20 × 3 _	
<b>14.</b> 3 × 8	<b>15.</b> 4 × 90 _	
<b>16.</b> 4 × 4	<b>17</b> . 30 × 6 _	
	Three vocabulary terms fo he division model. Use the multiplication sentence.	

\_\_\_\_\_ × \_\_\_\_\_ = \_\_\_\_

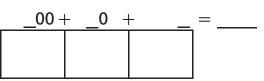
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#### Solve. Use the Place Value Sections Method for division.

Charlie has 944 baseball cards in his collection. He places the cards in an album with exactly 4 cards on each page. How many pages does Charlie fill in his baseball card album? 236 pages

- $4 \begin{array}{r} \underline{200 + 30 + 6} \\ 944 \\ -800 \\ -120 \\ -144 \\ -24 \\ -24 \\ -24 \\ 0 \end{array} = 236 \text{ pages}$
- A hardware store has 834 planks of wood to deliver to 6 building sites. If each site gets the same number of planks, how many planks should each building site get? \_\_\_\_\_\_



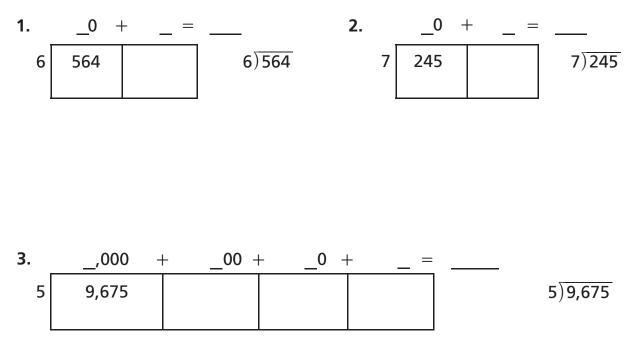
#### Solve. Use the Expanded Notation Method for division.

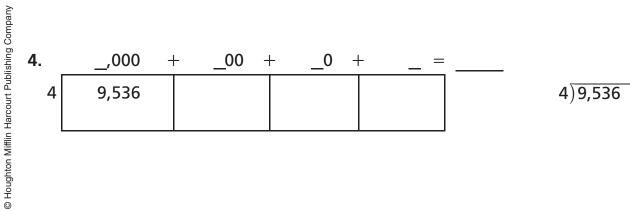
- 2. A park planner is designing a rectangular butterfly garden. The plan is for the garden to have an area of 1,917 square feet. If the garden is 9 feet wide, how long is it? \_\_\_\_\_
- 3. A family drives 1,498 miles from Boston, Massachusetts to Miami, Florida. If they drive the same number of miles each day for 7 days, how many miles will they drive each day? \_\_\_\_\_

3-2 Name		Date
Remembering		
Round each number to the	nearest hundred.	
<b>1.</b> 591	<b>2.</b> 827	<b>3.</b> 457
Round each number to the	nearest thousand.	
<b>4.</b> 7,129	<b>5.</b> 6,742	<b>6.</b> 1,028
Draw a rectangle. Find the and the total product.	tens product, the ones pro	duct,
<b>7.</b> 4 × 29	<b>8.</b> 8 × 36	
Divide with remainders.		
<b>9.</b> 7)38	<b>10.</b> 4)29	<b>11.</b> 3)14
<b>12. Stretch Your Thinking</b> Place Value Sections Me Notation Method. Expl your answer using mult	ethod and Expanded ain how you can check	
00 +	0 + =	3)594
3 594		



Solve. Use the Place Value Sections and the Expanded Notation Methods for division.





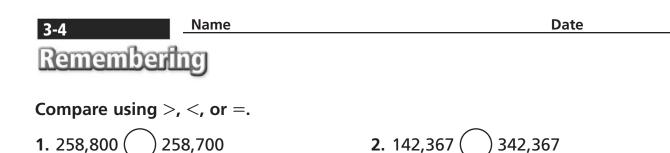
3-3 Name		Date
Remembering		
Read and write each number	in word form.	
<b>1</b> . 73,894		
<b>2.</b> 220,508		
3. 1,000,000		
<b>4.</b> 915,007		
Estimate each product. Solve	to check your e	stimate.
<b>5.</b> 6 × 42 6	. 3 × 19	<b>7.</b> 5 × 78
Solve. Use the Place Value Se Expanded Notation Method	_	nd the
8. A ball pit at an entertainm The balls are cleaned regu a certain number of balls a be run 8 times to clean all in the machine at one time	ent center conta larly by a machir at once. If the ma the balls, how m	e which can hold achine must
		8)2,120
8 2,120	) + = _	
<u> </u>	<u> </u>	

quotient of 588 divided by 6? Use place value to explain.

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3-4 Name		Date
Homework		
Divide.		
<b>1.</b> 6)2,142	<b>2.</b> 4)886	<b>3.</b> 8)576
<b>4.</b> 5)8,265	<b>5.</b> 3)795	<b>6.</b> 9)2,664
<b>7.</b> 6)259	<b>8.</b> 7)952	<b>9.</b> 3)7,459
Solve.		Show your work.
<ul><li>10. For the school field day, students are divided into 5 same-size teams. Any extra students will serve as substitutes. If 243 students participate, how many students will be on each team? How many substitutes will there be?</li></ul>		

**11.** A fruit stand sells packages containing 1 peach, 1 pear, 1 apple, 1 banana, and 1 mango each. One week they sold a total of 395 pieces of fruit. How many packages did they sell?



Use the Algebraic Notation Method to solve the problem. Complete the steps.

**3.** 7 · 28 \_\_\_\_\_

Solve. Use the Place Value Sections and the Expanded Notation Methods for division.

- 4.
   00 + 0 + = = 4)1,036 

   4
   1,036 =
- **5. Stretch Your Thinking** Jenna divides 2,506 by 4. Explain the error in Jenna's solution. Then show the correct solution.



3-5 Homework	Name		Date
Use any method	to solve.		
<b>1.</b> 5)652	<b>2.</b> 4)940	<b>3.</b> 6)840	<b>4.</b> 7)942
<b>5.</b> 5)6,502	<b>6.</b> 6)8,370	<b>7.</b> 4)5,267	<b>8</b> . 8)9,161

#### Solve.

- **9.** Joe had 145 peanuts in a bag. He fed all of the peanuts to the 5 squirrels that he saw. If each squirrel got the same number of peanuts, how many peanuts did each squirrel get?
- 10. There were 1,148 students at Jefferson High School who wanted to go on a field trip. Since they could not all go at the same time, they went in 7 equal groups. How many students were in each group?
- **11.** A printing company has 1,080 ink cartridges to be packed in 9 shipping boxes. If each box holds the same number of cartridges, how many ink cartridges will be packed in each box?

**Relate Three Methods** 



## Remembering

3-5

The table shows the water surface area of each of the Great Lakes. Use the data in the table to answer the following questions.

- 1. What is the combined surface area of the two Great Lakes with the greatest surface area?
- 2. Which is greater, the surface area of Lake Michigan or the sum of the surface areas of Lake Erie and Lake Ontario?

Lake	Surface Area (square kilometers)
Erie	25,655
Huron	59,565
Michigan	57,753
Ontario	19,009
Superior	82,097

Use	e any method	to solve.	Sketch a	rectangle	model,
if y	ou need to.				

**3.** 4 × 39 \_\_\_\_\_ **4.** 3 × 71 \_\_\_\_\_ **5.** 7 × 62 \_\_\_\_\_

Divide. Show your work.

<b>6.</b> 5)	1,985	<b>7.</b> 6)253	<b>8.</b> 7)1,477
--------------	-------	-----------------	-------------------

**9. Stretch Your Thinking** Which method do you prefer for division: the Place Value Sections Method, Expanded Notation Method, or Digit-by-Digit Method? Explain. Then solve  $6,583 \div 4$  using your preferred method.

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3-	6	Name			Date		
_	omeworl	3					
Sol	ve.						
1.	3)21	3)22	3)23	3)24	3)25		
2.	7)21	7)22	7)23	7)24	7)25		
3.	<b>3.</b> Describe how the repeating pattern in row 1 is different from the pattern in row 2. Explain why.						
Use	e any metho	d to solve.					
4.	9)2,359	5	5. 2)5,389	<b>6.</b> 4)	1,648		
7.	5)1,456	8	8. 8)2,506	<b>9.</b> 6)	8,473		
Sol	ve.				Show your work.		
10.		-	llection of 861 bas w many cards were				
11.		ong 8 stores. H	3 pairs of shoes to ow many pairs of				

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3-6 Name Remembering	Date
Write a number sentence that shows a each answer. Then write the exact answ	
<b>1.</b> 413 + 382	
<b>2.</b> 880 + 394	
<b>3.</b> 7,056 + 798	
Sketch rectangles and solve by any merror relates to your sketch.	thod that
<b>4.</b> 8 × 415	<b>5.</b> 6 × 853
Use any method to solve.	
<b>6.</b> 7)325 <b>7.</b> 5)7,390	<b>8.</b> 6)9,329
0. Stratch Vour Thinking Taby is shoosi	

**9. Stretch Your Thinking** Toby is choosing from two bead art projects. Project A uses equal numbers of red, black, and green beads totaling 825 beads. Project B uses equal numbers of black, blue, green, and yellow beads totaling 1,020 beads. Toby has 260 green beads and doesn't want to purchase more green beads. Explain which of the two bead projects Toby should choose.

3-7	Name			Date
Homewo	uls.			
Solve.				
<b>1.</b> 4)21	4)22	4)23	4)24	4)25
<b>2.</b> 6)21	6)22	6)23	6)24	6)25
	how the repeating from the pattern			
Use any meth	nod to solve.			
<b>4.</b> 8)6,726	<b>5.</b> 7)9,25	<del>9</del> 6.	3)1,504	<b>7.</b> 2)8,037
<b>8.</b> 9)3,385	<b>9.</b> 5)2,34	7 10.	6)9,003	<b>11.</b> 4)8,360
Solve.				
12 Altogoth	or the members of	f an overcice	dub drink	

- 12. Altogether, the members of an exercise club drink840 bottles of water each month. Each member drinks8 bottles. How many members are there?
- **13.** There are 7,623 pencils ready to be packaged in boxes at a factory. Each box holds 6 pencils. How many full boxes of pencils can be packaged?

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#### Subtract. Show your new groups.

Remembering

1.	5,267	2.	9,000	3.	6,129
_	1,390	_	- 2,482	_	- 5,773

#### **Cross out the additional numerical information and solve.** *Show your work.*

- 4. Rick is selling fresh-squeezed lemonade for \$2 a serving. Rick makes each serving with 2 lemons and 4 tablespoons of sugar. If he sells 27 servings of lemonade, how much sugar does he use?
- 5. An animal shelter receives 9 large bags of dog food every month for 14 years. Each bag weighs 55 pounds. How many pounds of dog food does the animal shelter receive each month?

#### Solve using any method.

**6.** 3)452

3-7

**7.** 8)527

**8.** 4)3,693

Date

**9. Stretch Your Thinking** What is the greatest remainder you could have with the divisor 3? With the divisor 8? With the divisor 5? Explain.

Solve by any method on a separate sheet of paper. Then check your answer by rounding and estimating.

<b>1.</b> 3)246	<b>2</b> . 6)75	<b>3</b> . 7)60
<b>4</b> . 3)256	<b>5</b> . 4)805	<b>6</b> . 5)927
<b>7</b> . 4)325	<b>8</b> . 4)378	<b>9</b> . 6)432
<b>10</b> . 5)1,838	<b>11</b> . 4)2,715	<b>12</b> . 7)3,042

#### Solve.

3-8

Homework

Show your work.

- **13**. The area of Matt's rectangular bedroom is 96 square feet. If the room is 8 feet wide, how long is it?
- 14. The fourth-grade students at Lincoln Elementary School are attending an assembly. There are 7 equal rows of seats in the assembly hall. If there are 392 fourth-grade students, how many students will sit in each row?
- 15. Pablo is packing books into crates. He has 9 crates. Each crate will contain the same number of books. If he has 234 books, how many books can he put into each crate?

3-8 Name		Date
Remembering		
Add or subtract.		
1. 1,429 + 3,882	<b>2.</b> 28,178 - 13,428	<b>3.</b> 500,000 <u>- 61,835</u>
Sketch an area model for find the product.	each exercise. Then	
<b>4.</b> 27 × 59	<b>5.</b> 36 × 92 _	
Solve using any method.		
<b>6.</b> 9)271	<b>7.</b> 6)2,436	<b>8.</b> 4)2,139

9. Stretch Your Thinking Katherine is considering two new cell phone plans. She doesn't want to spend more for minutes she won't use. One plan allows up to 250 minutes per month for \$49, and the other plan allows up to 350 minutes per month for \$65. In the last 6 months, she used 1,470 minutes. Use estimating and an exact answer to determine the best cell phone plan for Katherine.

3-9

Homework

Solve. Write the remainder as a whole number.

 1. 7)7,012
 2. 9)8,410
 3. 2)7,825

 4. 5)3,512
 5. 6)6,618
 6. 8)7,225

#### Solve. Then explain the meaning of the remainder.

- 7. Principal Clements wants to buy a pencil for each of the 57 fourthgraders in her school. The pencils come in packages of 6. How many packages does Principal Clements need to buy?
- 8. Tyler has 71 CDs in his collection. He places the CDs in a book that holds 4 CDs on each page. If Tyler fills each page, how many CDs will be on the last page?
- 9. Amanda and her family are hiking a trail that is 46 miles long. They plan to hike exactly 7 miles each day. How many days will they hike exactly 7 miles?
- 10. Cesar makes 123 ounces of trail mix. He puts an equal number of ounces in each of 9 bags. How many ounces of trail mix does Cesar have left over?

uy a th- ncils nany ents	
on. He holds lls each on the	
iking a y plan to	
exactly	
ail mix. ounces in nces of over?	

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Book

1

2

3

4

5

Word Count

82,647

91,313

109,842

73,450

90,216

Name

1. How many more words are there in

## Remembering

3-9

The table shows the word count for each of five books in a series. Use the table to answer each question. Estimate to check.

Book 2 than in Book 1? 2. What is the difference between the book with the greatest number of words and the book with the least number of words?

Solve each multiplication problem using any method. Use rounding and estimation to check your work.

70

04

<b>3.</b> 39 × 52	4.81 × /6	<b>5.</b> 18 × 63	<b>6.</b> 45 × 91	
Solve using any r	method. Then check	your answer by		

rounding and estimating.

20

**7**. 7)65 8. 3)289 9. 8)5,024

**10. Stretch Your Thinking** Write a word problem that is solved by  $43 \div 5 = 8$  R3, in which the remainder is the only part needed to answer the question.



When the Kent Elementary School fourth-grade classes were studying butterflies, they took a field trip to a butterfly garden.

# Use the correct operation or combination of operations to solve each problem.

Show your work.

- Nine buses of students, teachers, and parents went on the field trip. If 5 of the buses held 63 people each and the other buses held 54 people each, how many people went in all?
- 2. Some female butterflies lay their eggs in clusters. If one kind of butterfly lays 12 eggs at a time and another kind lays 18 eggs at a time, how many eggs would 8 of each kind of butterfly lay?
- 3. Teachers divided students into groups of 3. Each group of 3 wrote a report that had 9 pictures in it. The students used 585 pictures altogether. How many students were there in all?

4. Driving to and from the butterfly garden took 45 minutes each way. The students spent 3 hours in the garden and 30 minutes eating lunch. If the groups left the school at 9:00 A.M., what time did they get back?

3-10 Name		Date
Remembering		
Add or subtract.		
<b>1.</b> 5,833 <u>- 2,159</u>	<b>2.</b> 49,802 + 15,658	<b>3.</b> 98,139 - 27,345
Sketch rectangles and solv to your sketch.	e by any method that relate	25
<b>4.</b> 5 × 6,294	<b>5.</b> 8 × 1,375 .	

#### Solve. Then explain the meaning of the remainder.

- 6. Vince has 138 artist trading cards. He is arranging them in an album that can hold 4 to a page. If Vince fills each page as he goes, how many cards are on the last page?
- 7. Amber is doing an online math drill program. She has exactly 300 seconds to complete as many problems as she can. If it takes Amber 7 seconds to do each problem, how many problems does she complete?
- 8. Stretch Your Thinking In the fall, Wesley swam a race in 58 seconds, and Aiden swam it in 54 seconds. In the spring, they swam the same race. Wesley did it in 53 seconds, and Aiden did it in 52 seconds. How much more of an improvement was one boy's race time over the other boy's race time? Explain.

3-11	Name	Date
Homework		
Divide.		Show your work.
<b>1.</b> 5)456	<b>2.</b> 4)1,247	<b>3.</b> 7)829
<b>4.</b> 6)2,254	<b>5.</b> 3)729	<b>6.</b> 8)658
<b>7.</b> 9)4,437	<b>8.</b> 5)3,649	<b>9.</b> 6)875
,	,	·

#### Solve.

Show your work.

- **10.** Sharon has 1,278 beads to make bracelets. She sorts them into 6 different containers so she can have an equal amount of beads in each container. How many beads will Sharon put in each container?
- 11. Kyle collects baseball cards. He places his cards into an album that has 9 cards on each page. He has a total of 483 baseball cards. He fills each page before putting cards on the next page. How many cards will be on the last page?

3-11

#### Answer each question about the information in the table.

- 1. What was the total amount donated to the theatre in 2007 and 2009 combined?
- 2. How much more was donated in 2010 than in 2006?

## Solve using any method and show your work.

Check your work with estimation.

<b>3.</b> 26 × 6	<b>4.</b> 932 × 7	<b>5.</b> 2,107 × 8
------------------	-------------------	---------------------

#### Use the correct operation or combination of operations to solve the problem.

- 14 pairs of earrings for \$8 each. How much did she make in sales?
- 7. Stretch Your Thinking At a skating rink, Emma makes 21 laps at a steady pace during a 5-minute song. She divided  $21 \div 5 = 4$  R1 and says that means she did 4 + 1 = 5 laps each minute. Explain Emma's error.

#### Donations to a Children's Theatre

Year	Donations
2006	\$26,304
2007	\$28,315
2008	\$63,418
2009	\$53,237
2010	\$86,061

6. Selena sold 9 homemade bracelets for \$12 each and

Show your work.

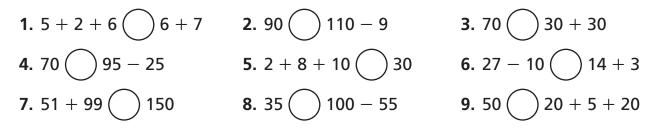
### 4-1 Homework

### Simplify each expression.

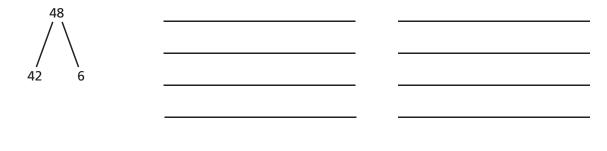
1.	11 <i>m</i> – 9 <i>m</i> =	<b>2</b> . y	+ 8 <i>y</i> =	3	. 13 <i>s</i> – <i>s</i> =
4.	d + 2d + d =	5. (9	(bb - b) - 2b =	6	. 104 <i>z</i> + <i>z</i> =
7.	21 - (10 - 5) =	8. (9	900 - 100) - 100 =	_ 9	. 90 - (50 - 1) =
10.	18 ÷ (27 ÷ 9) = 1	1. (6	53 ÷ 7) ÷ 9 =	12	. 40 ÷ (36 ÷ 9) =
13.	$(48 \div 6) \cdot (11 - 9) = -$		<b>14.</b> (3 + 17)	÷ (1	6 - 12) =
15.	(15 + 10) - (50 ÷ 10)	=	<b>16.</b> (19 + 11)	÷ (	9 – 6) =
Eva	uate.				
17.	c = 3	18.	<i>r</i> = 2	19.	w = 7
	$4 \cdot (7-c)$		$(42 \div 7) \cdot (r + 1)$		$(72 \div 9) \cdot w$
20.	$\overline{m = 0}$	21.	h = 14	22.	<i>ρ</i> = 19
	$(12 \div 3) \cdot (5 - m)$		45 ÷ (h − 5)		( <i>p</i> + 1) ÷ (9 − 4)
23.	$\overline{v=6}$	24.	$\overline{t=1}$	25.	$\overline{g} = 10$
	(18 - 9) + (2 + <i>v</i> )		$(7 \cdot 2) \div t$		( <i>g</i> + 90) ÷ (17 − 13)
Solv	re for □ or <i>n.</i>				
26.	$7 \cdot (3+2) = 7 \cdot \Box$	27.	$(9-1)\cdot 4=\Box\cdot 4$	28.	$8 \cdot (4+5) = \Box \cdot 9$
	□ =				□ =
29.	$6 \cdot (8 - 8) = n$	30.	$(12-6) \div 3 = n$	31.	$(21 \div 7) \cdot (5 + 5) = n$
	n =		n =		n =

4-	Name		Date
-	amembering		
Rea	d and write each number in ex	panded form.	
1.	ninety-six thousand, one hund	red thirty-seven	
2.	four hundred thirteen thousan	d, five hundred twenty-c	one
3.	seven hundred eight thousand	, fifty-three	
4.	six hundred thirty thousand, fo	our hundred seventeen	
	d the area (in square units) of a en dimensions.	a rectangle with the	
5.	4 × 6	<b>6.</b> 4 × 60	
7.	5 × 9	<b>8.</b> 50 × 9	
Div	ide with remainders.		
9.	9) <u>28</u> <b>10.</b> 3)17	<b>11.</b> 6)46	<b>12.</b> 7)54
13.	Stretch Your Thinking Evaluate $(d - 10) + (d \div 3)$ for $d = 21$ . E		

Write = or  $\neq$  to make each statement true.



**10.** Write the eight related addition and subtraction equations for the break-apart drawing.



Write an equation to solve the problem. Draw a model if you need to.

11. There were some people at the arts and crafts fair. Then 347 people went home. Now 498 people are left at the fair. How many people were at the fair to start?

12. A group of scientists spends 3,980 hours observing the behavior of monarch butterflies. They spend some more hours recording their observations. Altogether, the scientists spend 5,726 hours observing the butterflies and recording their observations. How many hours do the scientists spend recording their observations?

Show your work.

4-2

<u>Homework</u>

4-2 Name	Date
Remembering	
Solve.	
1. What is 538,152 rounded to th	ne nearest:
a. hundred?	b. thousand?
c. ten thousand?	d. hundred thousand?
Draw a rectangle model. Find th the ones product, and the total	-
<b>2.</b> 3 × 65	<b>3.</b> 8 × 29
Evaluate each expression.	
<b>4.</b> (12 – 4) • (6 + 3) =	<b>5.</b> (8 ÷ 2) + (12 − 2) =
6. Stretch Your Thinking There was at a children's used book fair. there were still 493 books rem there were 112 books at the s Explain her error. How many k the start of the book fair?	At the end of the day, naining. Samantha says tart of the book fair.

4-3	Name
Homework	

1. Write the eight related multiplication and division equations for the rectangle model below.

15       6     90		
Solve each equation.		
<b>2.</b> <i>r</i> = 200 ÷ 5	<b>3.</b> 12 × <i>d</i> = 84	<b>4.</b> 80 ÷ 10 = <i>n</i>
r =	d =	n =
<b>5.</b> 120 = 10 × <i>m</i>	<b>6.</b> 88 = 8 × c	<b>7.</b> 100 ÷ <i>q</i> = 20
<i>m</i> =	c =	<i>q</i> =

Write an equation to solve the problem. Draw a model if you need to.

8. Lucy bought some shrubs to plant in her garden. Each shrub cost \$9. If Lucy spent \$216 in all, how many shrubs did she buy?

Show your work.

Date

9. Jeremiah has 592 flyers in stacks of 8 flyers each. How many stacks of flyers did Jeremiah make?

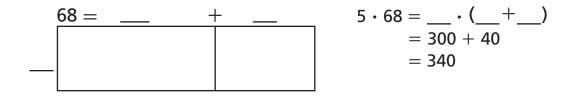
**10.** The apples from an average-sized tree will fill 20 baskets. If an orchard has 17 average-sized trees, how many baskets of apples can it produce?

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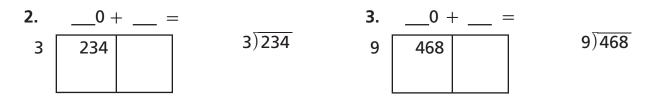


Use the Algebraic Notation Method to solve the problem. Complete the steps.

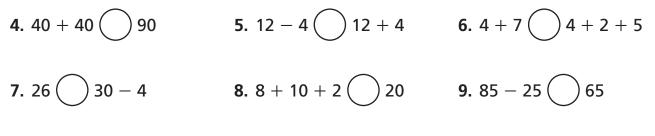
**1.** 5 · 68 \_\_\_\_\_



# Solve. Use the Place Value Sections and the Expanded Notation Methods for division.



Write = or  $\neq$  to make each statement true.



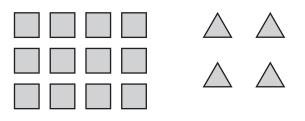
**10. Stretch Your Thinking** Write a word problem about puzzle pieces using the equation  $9 \times p = 450$ . Then solve the equation.

Date



4-4

Use the shapes to answer Exercises 1–4.



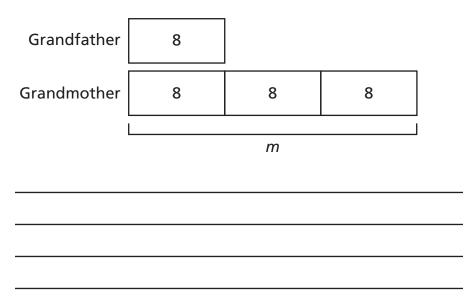
- How many squares? How many triangles? Use multiplication to find the answers.
- **2.** Because  $4 \times \underline{\qquad} = 12$ , there are  $\underline{\qquad}$  times as many squares as triangles.
- **3.** Write a multiplication equation that compares the number of squares *s* to the number of triangles *t*.
- Write a division equation that compares the number of triangles t to the number of squares s.

#### Solve each comparison problem.

- 5. Stephen and Rocco were playing a video game. Stephen scored 2,500 points which is 5 times as many points as Rocco scored. How many points did Rocco score?
- 6. Nick's dog weighs 72 pounds. Elizabeth's cat weighs9 pounds. How many times as many pounds doesNick's dog weigh as Elizabeth's cat weighs?

4-4 Na	ame		Date
Remembering	l		
Solve using any num estimating to see if y		-	
<b>1.</b> 71	<b>2.</b> 36	<b>3.</b> 94	<b>4.</b> 77
$\times$ 4	<u>× 5</u>	<u>× 8</u>	<u>× 6</u>
Divide.			
<b>5.</b> 6)89	<b>6.</b> 5)485		<b>7.</b> 4)743
Solve each equation.			
<b>8.</b> 9 × <i>n</i> = 108	<b>9.</b> 40 ÷ <i>t</i> =	10 <b>1</b>	<b>0.</b> <i>r</i> = 56 ÷ 7
n =	t =		r =

**11. Stretch Your Thinking** Write and solve a word problem to match the comparison bars shown below.



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Write and solve an equation to solve each problem. Draw comparison bars when needed.

- This year, a business had profits of \$8,040. This is 4 times as great as the profits that the business had last year. What were last year's profits?
- 2. In July, 74,371 people visited an art museum. In August 95,595 people visited the art museum. How many fewer people visited the art museum in July than in August?
- **3.** Drake has 36 animal stickers. Brenda has 9 animal stickers. How many times as many animal stickers does Drake have as Brenda has?
- **4.** A game is being watched by 60 adults and some children. If there are 20 more adults than children, how many children are watching the game?
- 5. During the first lunch period, 54 students ate hot lunch. This is 9 fewer students than ate hot lunch during the second lunch period. How many students ate hot lunch during the second lunch period?
- 6. The Jenkins Family traveled 750 miles by car during the summer. The Palmer Family traveled 3 times as many miles by car this summer. How many miles did the Palmer Family travel?

Show your work.

Copy each exercise, aligning the places correctly. Then add.

**1.** 11,931 + 3,428

Remembering

4-5

**2.** 25,422 + 89,360

Draw a rectangle model. Solve using any method that relates to the model.

**3.** 3 × 428 \_\_\_\_\_

4.	7	×	519	

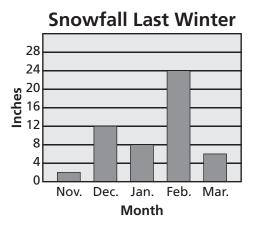
Write and solve an equation to solve the problem. Draw comparison bars if you need to.

- 5. Virginia sold 84 rolls of wrapping paper this year. She sold 3 times as many rolls of wrapping paper this year as she sold last year. How many rolls of wrapping paper did Virginia sell last year?
- 6. Stretch Your Thinking There are 1,438 boys and 1,196 girls at a school. How many fewer girls are there than boys?

Write the comparison question for this problem in a different way. Then write and solve an equation to solve the problem. Draw comparison bars if you need to. Homework

The graph below shows the amount of snow recorded each month last winter. Use the graph for Problems 1–6.

- During which month was the amount of snow recorded 12 inches greater than the amount of snow recorded in December?
- 2. How many fewer inches of snow were recorded in March than were recorded in February?



- **3.** The total amount of snow shown in the graph is 4 times as much snow as was recorded during the winter of 2004. How much snow was recorded during the winter of 2004?
- 4. Write an addition equation and a subtraction equation that compare the number of inches of snow recorded during December (d) to the number of inches of snow recorded during March (m).
- 5. Write a multiplication equation and a division equation that compare the number of inches of snow recorded during November (n) to the number of inches of snow recorded during January (j).
- 6. On a separate sheet of paper, write a sentence about the graph that contains the words *times as much.*

4	-6 Name	Date			
5	lememberling				
Sk	etch an area model for each exercise. The	en find the product.			
1.	28 × 45 2.	53 × 96			
Sc	olve using any method.				
2	9)506 4. 2)538	<b>5.</b> 7)8,165			
Э.	9) 500 <b>4.</b> 2) 530	<b>J</b> . 7)8,105			
	rite and solve an equation to solve each raw comparison bars when needed.	problem. Show your work.			
6.	6. Benjamin received 52 emails at work today. This is 4 times as many emails as he received yesterday. How many emails did Benjamin receive yesterday?				
7.	7. There are 327 third-grade students on a field trip at the history museum. There are 423 fourth-grade students on the same field trip. How many fewer third-grade students are there than fourth-grade students on the field trip?				
8.	<b>Stretch Your Thinking</b> Look at the graph. Tatiana says there are 4 more dog owners than fish owners in the classroom. Explain Tatiana's error. Then write an equation that compares the numbers of dog owners and fish owners in the classroom.	Pet Owners in the ClassroomPet $\bigcirc$ Cat $\bigcirc$ Bird $\bigcirc$ Dog $\bigcirc$ $\bigcirc$ $\bigcirc$ Fish $\bigcirc$			



#### Use an equation to solve.

- The soccer club has 127 members. The baseball club has 97 members. Both clubs will meet to discuss a fundraiser. The members will be seated at tables of 8 members each. How many tables will they use?
- 2. A hardware store pays \$3,500 for 42 lawnmowers. Then the store sells the lawnmowers for \$99 each. How much profit does the store make from the lawnmower sales?
- 3. George buys a set of 224 stamps. He gives 44 stamps to a friend. Then he places the remaining stamps into an album with 5 stamps on each page. How many pages does he fill in his album?
- 4. Shane and his family go to the movie theater and buy 6 tickets for \$12 each. Then they spend a total of \$31 for popcorn and drinks. How much did Shane and his family spend for tickets, popcorn and drinks at the movie theater?

5. Last year, 226 people attended the school graduation ceremony. This year, the school expects 125 more people than last year. The school has arranged for a van to transport people from the parking area to the ceremony. Each van holds 9 people. How many trips will the van make?

Show your work.

4-7	Name		Date		
Remembering					
Solve each multiplication problem, using any method. Use rounding and estimation to check your work.					
<b>1.</b> 22 × 58	<b>2.</b> 34 × 91	<b>3.</b> 63 × 72	<b>4.</b> 17 × 56		

Solve by using any method. Then check your answer by rounding and estimating.

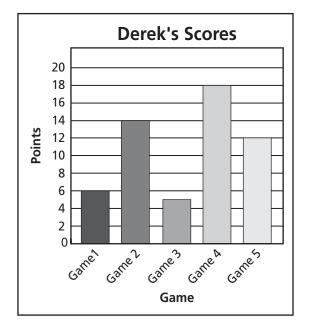
**5.** 9)39

**6.** 4)168

**7.** 5)4,204

# The graph shows the number of points Derek scored during his first five basketball games.

- Write a multiplication equation and a division equation that compare the number of points Derek scored during Game 1 (x) to the number of points Derek scored during Game 4 (y).
- 9. Stretch Your Thinking There will be 138 people at a fundraising auction. Each table seats six. An additional 3 tables are needed to display the auction items. What is the minimum number of tables that are needed for the fundraiser? Which equation cannot be used to answer this question? Explain.



 $138 \div (6 + 3) = t$   $(138 \div 6) + 3 = t$ 



#### Use an equation to solve.

- 1. Rosa and Kate both went shopping. Kate bought a jacket for \$45 and boots for \$42. Rosa bought jeans for \$27, a sweater for \$22, and sneakers. They both spent the same exact amount of money. How much were Rosa's sneakers?
- 2. Kyle works at a bakery on weekends. On Saturday, Kyle needs to make 120 muffins. Each recipe makes 8 muffins and uses 2 cups of flour. On Sunday, he needs to bake a large batch of cookies that uses 6 cups of flour. How many cups of flour will Kyle use to bake the muffins and the cookies?
- 3. A toy factory made 715 small stuffed bears and packed them in boxes with 5 bears in each box. Then they made 693 large stuffed bears and packed them in boxes with 3 bears in each box. All the boxes of small and large stuffed bears are loaded into a truck for delivery. How many boxes are loaded into the truck?
- 4. Last summer, Chris went to Europe and bought postcards from the cities he visited. In France, he visited 6 cities and bought 11 postcards in each city. In Italy, he visited 7 cities and bought 9 postcards in each city. In Spain, he visited 10 cities and bought 15 postcards in each city. How many postcards did Chris buy in Europe?
- 5. Three fourth grade classes went on a field trip to see a play. Each class had 19 students and 2 adults attending. The rows in the playhouse each seat 9 people. How many rows did the fourth grade classes and adults take up at the playhouse?

4-8 Name			Date
Remembering			
Add or subtract.			
<b>1.</b> 9,000 <u>- 5,613</u>	<b>2.</b> 317,492 + 36,057		59,741 52,438
Solve. Then explain the me	aning of the ren	nainder.	
<b>4.</b> Jessica needs to bake 50 Her baking pan holds 12 How many rounds of bal need to do?	muffins.		
Use an equation to solve.			Show your work.
<ol> <li>At the fair, Hannah boug \$3 each and a pitcher of money did she spend in a</li> </ol>	lemonade for \$6	-	
6. Reggie is keeping 7 of his 31 stuffed animals and splitting the remainder of his collection evenly among his 3 young sisters. How many stuffed animals does each sister get?			r
7. Stretch Your Thinking Write a word problem using the equation ( $$60 + $3 - $15$ ) $\div $4 = w$ . Then solve the equation to solve the problem.			_
			-

### Homework

4-9

#### Solve each problem.

- 1.  $5 \times 7 + 9 = t$  2.  $9 \times (1 + 3) = m$  

   3.  $7 2 \times 2 = k$  4.  $(7 \times 2) + (4 \times 9) = w$  

   5.  $(7 2) \times (3 + 2) = r$  6.  $8 \times (12 7) = v$
- 7. Whitney and Georgia are at the snack bar buying food for their family. Sandwiches cost \$4 each. Salads cost \$2 each. How much money will it cost them to buy 5 sandwiches and 7 salads?
- 8. Lisa put tulips and roses into vases. Each vase has 12 flowers. The red vase has 7 tulips. The blue vase has twice as many roses as the red vase. How many roses are in the blue vase?
- 9. Pam has 9 bags of apples. Each bag contains 6 apples. There are 3 bags of red apples and 1 bag of green apples. The rest of the bags contain yellow apples. How many more yellow apples are there than red apples?
- 10. Clay works on a farm. He packaged eggs into containers that hold 1 dozen eggs each. He filled 4 containers with white eggs and 5 containers with brown eggs. How many eggs did Clay collect? Hint: one dozen eggs = 12 eggs

4-9	Name		Date		
Rememberfr	g				
Subtract. Show yo	ur new groups.				
<b>1.</b> 3,146	<b>2.</b> 7,50	)4	<b>3.</b> 6,000		
— 1,960	- 2,73	8	— 5,241		
		—			
Solve using any method and show your work.					
Use estimation to check your work.					
<b>4.</b> 23 × 88	<b>5.</b> 71 × 49	<b>6.</b> 62 × 67	<b>7.</b> 15 × 38		

#### Use an equation to solve.

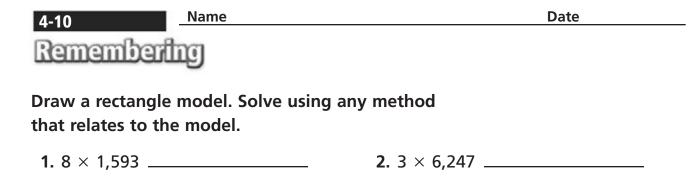
- 8. An audio book is made up of 8 CDs. Each of the first 7 CDs is 42 minutes long and the final CD is 26 minutes long. Mark plans to listen to the book the same number of minutes for 8 days. How many minutes each day will Mark listen to the audio book?
- **9. Stretch Your Thinking** A sign shows the price per pound for several bulk food items. Use the information to write a word problem that requires at least 3 steps to solve. Then solve your problem

Food Item	Cost	
roou item	per pound	
mixed nuts	\$5	
dried fruit	\$3	
snack mix	\$7	
wild rice	\$2	
red lentils	\$4	

Name

4-10

	omework				
List	t all the factor pa	airs for each n	umber.		
1.	49		<b>2.</b> 71		
3.	18		<b>4</b> . 57		
Wri	ite whether each	n number is <i>pr</i>	ime or composite.		
5.	50	<b>6</b> . 29		<b>7.</b> 81	
8.	95	<b>9</b> . 19		<b>10.</b> 54	
Tell	whether 6 is a	factor of each	number. Write <i>yes</i> c	or no.	
11.	6	<b>12.</b> 80	<b>13.</b> 36	<b>14.</b> 7	2
Tell	whether each r	umber is a mu	Iltiple of 8. Write ye	es or <i>no.</i>	
15.	64	<b>16.</b> 32	17. 88	<b>18.</b> 1	8
Use	e the rule to com	plete the patt	ern.		
19.	Rule: skip count	: by 11			
	11, 22,,	, 55,	,, 88, 99		
20.	Rule: skip count	: by 9			
	9,, 27,	, 45,	, 63,, 81, .		
21.	Rule: skip count	: by 8			
	8, 16, 24,	_,,	,, 64, 72, .		



Use the correct operation or combination of operations to solve the problem.

**3.** Melina has 4 sheets of wacky face stickers with 24 stickers on each sheet. Melina cuts each sticker individually from the sheet. She then divides them evenly into 3 piles to give to friends. How many stickers are in each pile?

#### Solve.

<b>4.</b> $5 \times 4 + 7 = g$	5.	5. $(3 \times 7) + (2 \times 10) = h$	
<b>6.</b> 16 – (5 × 3) = m	7.	ℓ. (9 − 3) × (2 + 7) = /	
<b>8.</b> $(12 - 8) + (3 \times 3) = p$	9.	). $(24 \div 4) + 19 = t$	
<b>10. Stretch Your Thinking</b> complete the sentence. All even numbers grea	ur choice.		

#### Use the rule to find the next three terms in the pattern.

**1.** 2, 6, 18, 54, ...

Homework

4-11

**2.** 115, 145, 175, 205, 235, ...

Rule: multiply by 3

Rule: add 30

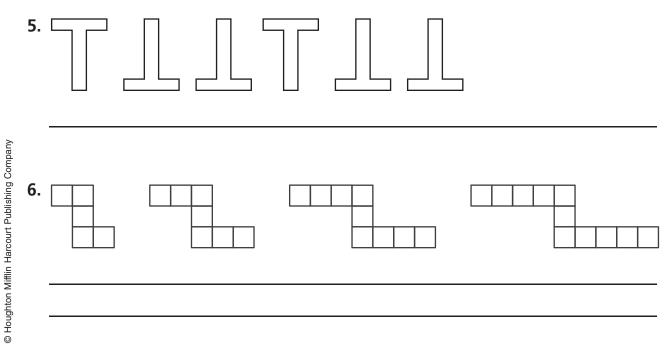
### Use the rule to find the first ten terms in the pattern.

3. First term: 12	Rule: add 25
-------------------	--------------

#### Make a table to solve.

4. Jay saves \$2 in June, \$4 in July, \$6 in August, and \$8 in September. If the pattern continues, how much money will Jay save in December?

### Describe the next term of each pattern.



4-11 Name Remembering	Date
Subtract.	
1.       491,562       2.       392,119         -       208,723       -       48,319	
Solve.	Show your work.
<b>3.</b> Sid unpacks 8 cartons of paper clips. Each carton cont 3,500 paper clips. How many paper clips is this altoge	
<b>4.</b> Camille unpacks 102 boxes of red pens and 155 boxes of blue pens. Each box contains 8 pens. How many pens does she unpack altogether?	5
List all of the factor pairs for each number.	
<b>5.</b> 55 <b>6.</b> 14	
7. Stretch Your Thinking During the first week of the year Angelina's dad gives her \$10 and says that he will give her \$10 more each week for the rest of the year. At the end of the year, how much money will Angelina recerring from her dad? (Hint: 1 year = 52 weeks) Make a table show the pattern, and explain your answer.	re he ive

4-12

Homework

- **1.** Design the blank pot below by drawing a pattern that meets the following conditions.
  - At least three different shapes are used.
  - The pattern begins with a square or a circle.
  - The pattern is repeated at least two times.
  - At least two different colors are used.



2. Describe your pattern.

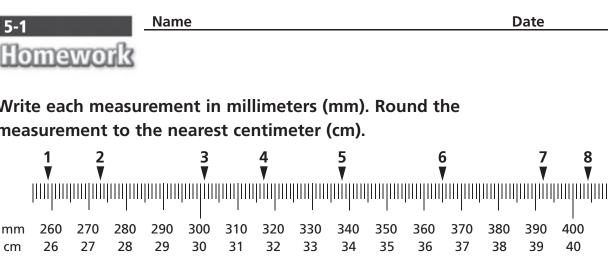
3. Suppose 184 students from Wilson Middle School complete this page at home. If each student draws 9 shapes on his or her pot, how many shapes in all would be drawn?

4-12 Rememberir	Name	Date	
Add or subtract.			
<b>1.</b> 8,500 <u>- 1,265</u>	<b>2.</b> 24,187 <u>- 14,856</u>	<b>3.</b> 683,519 + 292,744	
Solve using any m work with estimat	ethod and show your wo ion.	rk. Check your	
<b>4.</b> 19 <u>× 82</u>	5. 649 <u>× 3</u>	6. 2,934 <u>× 8</u>	
Use the rule to fin	d the next five terms in tl	ne pattern.	
<b>7.</b> 3, 6, 12, 24,	8.	25, 60, 95, 130,	
Rule: multiply	by 2	Rule: add 35	
Use the rule to find the first ten terms in the pattern.			

9. First term: 18 Rule: add 12

**10. Stretch Your Thinking** For a cookie exchange, Kaiya bakes 2 pans of 12 chocolate chip cookies each, 3 pans of 16 lemon drops each, and 4 pans of 10 peanut butter cookies each. She is dividing the cookies into 8 tins, with an equal number of each type of cookie in each tin. How many of each type of cookie will be in each tin? How many cookies in all will be in each tin? Explain.

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6

V

Write each measurement in millimeters (mm). Round the measurement to the nearest centimeter (cm).

mm 260 270 360 370 380 390 400 26 27 36 37 38 39 40 cm **1.** \_\_\_\_\_ mm rounds to \_\_\_\_\_ cm **2.** \_\_\_\_\_ mm rounds to \_\_\_\_\_ cm **3.** \_\_\_\_\_ mm rounds to \_\_\_\_\_ cm **4.** \_\_\_\_\_ mm rounds to \_\_\_\_\_ cm 5. \_\_\_\_\_ mm rounds to \_\_\_\_\_ cm 6. \_\_\_\_\_ mm rounds to \_\_\_\_\_ cm 7. \_\_\_\_\_ mm rounds to \_\_\_\_\_ cm 8. \_\_\_\_\_ mm rounds to \_\_\_\_\_ cm Write a number sentence to answer each question. 9. How many meters are equal to 7 kilometers? 10. How many centimeters are equal to 4 meters? 11. How many millimeters are equal to 15 centimeters? 12. How many millimeters are equal to 12 meters? **13.** How many centimeters are equal to 2 kilometers? Solve. Show your work. 14. Chester has a ribbon that is 2 meters long. He wants to cut it into 5 equal pieces. How many centimeters long will each piece be?

1

V

Measure Length 113

5-1	Name	Date
Rememberin	0	
Add or subtract.		
<b>1.</b> 7,295	<b>2</b> . 84,366	<b>3.</b> 541,000
+ 2,941	- 20,472	<u> </u>
Divide with remain	ders.	
<b>4.</b> 4)31	<b>5.</b> 6)44	<b>6.</b> 9)32
Evaluate.		
<b>7.</b> <i>t</i> = 5	<b>8</b> . <i>k</i> = 25	<b>9.</b> <i>p</i> = 3
(9 + <i>t</i> ) ÷ 2	<i>k</i> ÷ (10 ÷ 2)	(6 + <i>p</i> ) ⋅ (15 − 11)
40 2	44 5	42 4
<b>10.</b> <i>g</i> = 2	<b>11.</b> <i>r</i> = 5	<b>12.</b> <i>x</i> = 1
(g ÷ 2) ⋅ 8	$(15 - r) \cdot (9 - 3)$	$(2 \cdot 8) \div (4 \div x)$
12 Ctuatala Varue Th	in him . Kulo and the mounth on it	

**13. Stretch Your Thinking** Kyle says the number is greater when an object is measured in centimeters than in millimeters. Is Kyle correct? Explain.

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### Complete.

1. How many milliliters are equal to 3 L?

2. How many milliliters are equal to 35 L?

- 3. How many grams are in 40 kg?
- 4. How many grams are in 5,000 kg?

#### Solve.

Show your work.

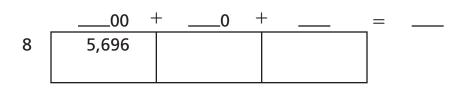
- **5.** Every morning for breakfast, Mika drinks 20 cL of orange juice. How many milliliters of orange juice does she drink each day?
- **6.** Angie's puppy weighed 3 kg when she first got it. Two years later, it weighed 9 kg. How many grams did the puppy gain?
- **7.** Write and solve two word problems: one that involves converting units of liquid volume and one that involves converting units of mass.

# 5-2 Na

Solve. Use the Place Value Sections Method and the Expanded Notation Method for division.

 A coin candy machine contains 5,696 pieces of candy. With each quarter, a customer receives 8 pieces of candy. How many customers can use the candy machine before it must be refilled?

8)5,696

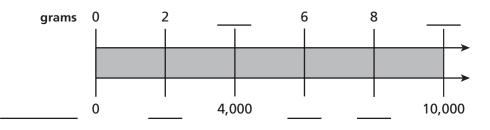


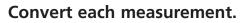
Write an equation to solve the problem. Draw a model if you need to.

2. At the library one day, 1,742 books were checked out in the morning. Some more books were checked out in the afternoon. Altogether that day, 2,563 books were checked out. How many books were checked out of the library in the afternoon?

### Write a number sentence to answer the question.

- 3. How many centimeters are equal to 6 meters?
- 4. Stretch Your Thinking Complete the double number line.





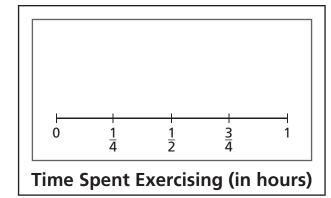
Homework

5-3



## Complete the line plot. Answer the questions using the line plot.

7. Melissa asked her classmates how much time they spend each day exercising. The table shows the data Melissa collected. Complete the line plot using the data from the table.



Time	Number
0 hour	0
$\frac{1}{4}$ hour	4
$\frac{1}{2}$ hour	3
$\frac{3}{4}$ hour	6
1 hour	2

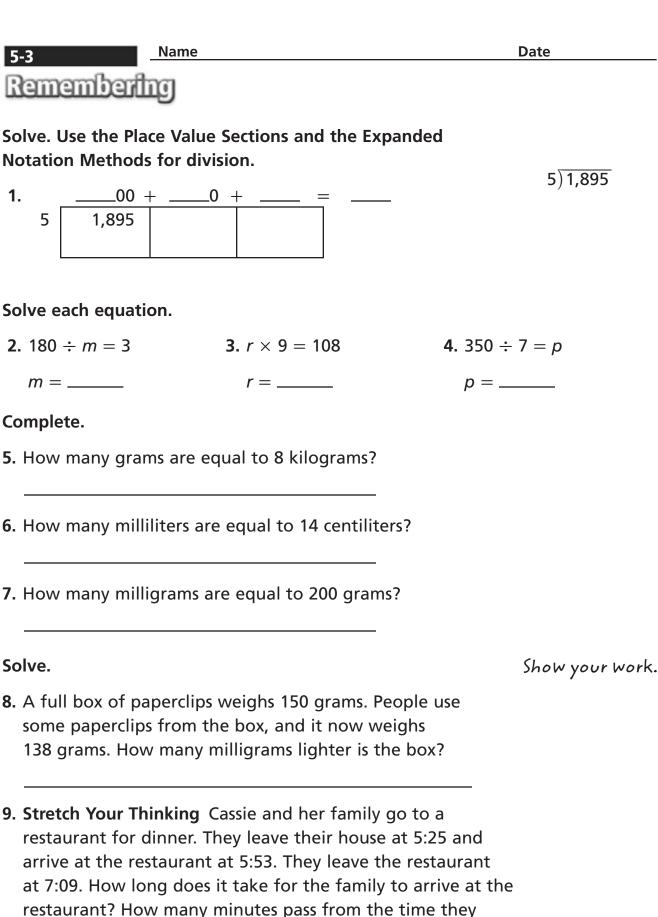
Date

- a. How many more students exercised for  $\frac{3}{4}$  hour than  $\frac{1}{4}$  hour?
- **b.** How many students did Melissa ask about how much time they exercise? \_\_\_\_\_

### Solve.

- 8. Donald takes the bus to work. The bus ride is 37 minutes long. Donald gets on the bus at 7:22. At what time does Donald get off the bus?
- 9. Kinesha started her homework at 6:15. She finished at 7:32. How long did it take Kinesha to do her homework?

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leave their house to the time they leave the restaurant?

Date

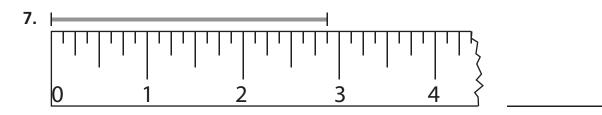
### Complete the tables.

1.	Yards	Inches	2.	Miles	Feet
	3			2	
	6			3	
	9			4	
	12			5	

### Solve.

**3.** 4 ft = \_\_\_\_\_ in. **4.** 3 miles = \_\_\_\_\_ yards **5.** 11 yd = \_\_\_\_\_ ft **6.** 26 ft = \_\_\_\_\_ in.

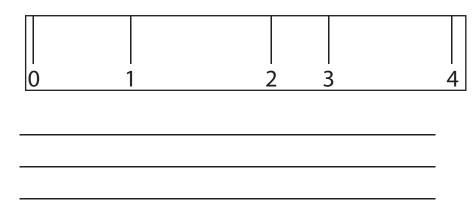
### Write the measurement of the line segment to the nearest $\frac{1}{8}$ inch.



### Solve.

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8. Explain what is wrong with the ruler shown below.



5-4

5-4 Rememberin	Name	Date
Divide.		
<b>1.</b> 6)582	<b>2.</b> 5)4,961	<b>3.</b> 7)6,334

### Solve the comparison problem.

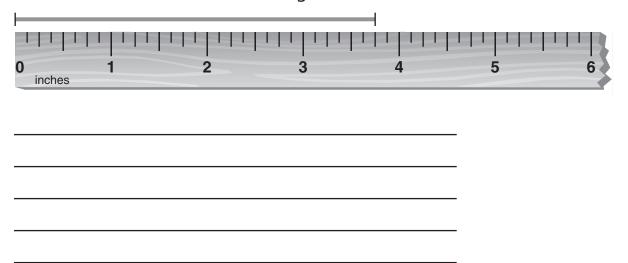
4. Michael made \$265 taking care of his neighbors' pets this summer. This was 5 times the amount he made last summer. How much money did Michael make taking care of pets last summer?

### Convert each measurement.

- **5.** 9 days = \_\_\_\_\_ hrs
- **6.** 14 min = \_\_\_\_\_ sec

7. 6 hrs = \_\_\_\_\_ min

- **8.** 4 weeks = \_\_\_\_\_ days
- **9. Stretch Your Thinking** Zack says that the line segment is  $3\frac{7}{10}$  inches long. Explain Zack's error. What is the correct measurement of the line segment?







### Solve.

Show your work.

- A female rabbit gave birth to 6 babies. Each baby weighed 4 ounces. How many ounces did the babies weigh in all?
- 2. One watermelon weighs 128 ounces. Another weighs 112 ounces. Which watermelon is heavier? By how many ounces?
- **3.** A box of cereal weighs 21 ounces. Does it weigh more or less than 1 pound? How much more or less?
- **4.** Mark had 3 quarts of milk. How many pints of milk did Mark have?
- 5. Trevon's mom bought 3 gallons of fruit juice at the store. How many fluid ounces of fruit juice did Trevon's mom buy?
- 6. Marinda made a drink that contained 2 pints of apple juice, 3 pints of grape juice, and 2 pints of cranberry juice. How many pints of juice did Marinda make?

5-	5	Name			Date
R	ememberfl	IJ			
So	lve using any m	ethod.			
1.	7)643	<b>2.</b> 2)5,	698	3. 4	4)8,913
		n equation to so bars when need	•	roblem.	Show your work.
-	twice the numb	aps at a pool foi er of laps he exp nany laps was Ch	pected he	would be able	2
	12 more ounces	ounces of water than she drank drink yesterday	yesterday.		
Со	mplete the tabl	es.			
6.	Feet	Inches	7.	Miles	Yards
	2		]	3	
	4			4	
	5			8	

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8. Stretch Your Thinking Kai needs to pour 2 gallons of water into his fish tank. All he has is a measuring cup. How many cups of water should he put in the tank? Explain.

8

10

### Homework

5-6

Find the area and perimeter for rectangles with the lengths and widths shown.

<b>1.</b> <i>I</i> = 5 units	<b>2.</b> <i>I</i> = 8 units	<b>3.</b> <i>l</i> = 7 units	<b>4.</b> <i>l</i> = 4 units
w = 6 units	w = 4 units	w = 5 units	w = 7 units
A =	A =	A =	A =
P =	P =	P =	P =

5. Challenge Using only whole numbers, make as many different rectangles as you can that have either the same area or the same perimeter as the rectangles in Exercises 1–4.

Solve each word problem. Show the formula you used to find the answer.

- 6. Enzo is building a dog run that measures 10 feet by9 feet. How many feet of fencing does he need to fence in the area?
- 7. A sheet of construction paper is 9 inches long and 11 inches wide. How many 1-inch squares of paper can Dwayne cut out of one sheet of paper?

8. Mieko has a rug that is 6 feet long and 8 feet wide. Her room measures 9 feet each way. Will the rug fit in her room? How do you know? Show your work.

5-6 Name		Date
Remembering		
Add or subtract.		
<b>1.</b> 7,382	<b>2.</b> 47,291	<b>3.</b> 573,019
— 2,990	- 3,845	+ 32,485
Use an equation to solve.		
stock their shelves. Each	shipment of 38 board games board games sells for \$24. I ore make on the sales of the	How

### Solve.

- **5.** A preschool uses 4 gallons of milk a day. How many fluid ounces of milk does the preschool use in a day?
- 6. Stretch Your Thinking A bathroom has a length of 10 feet and a width of 9 feet. Kade wants to put down tiles on the floor that are each 1 square foot. Then he will put a baseboard along the edges where the walls meet the floor. How many tiles does Kade need? How much baseboard does he need? Show your work.





### Solve.

Show Your Work.

- Barbara has a rectangular shaped mouse pad. The longest side of the mouse pad is 8 inches and the shortest side is 3 inches. What is the perimeter and area of the mouse pad?
- 2. Yeasmin has a cup with 27 milliliters of milk in it. She pours another 34 milliliters of milk into the cup. She then drinks 14 milliliters of the milk. How much milk is left in the cup?
- **3.** John's dog weighed 7 pounds when he got him. The dog's weight tripled each year for two years. How many ounces does John's dog now weigh?
- 4. The area of a rectangular shaped living room was 240 sq ft. The longest side of the room was 20 ft. What is the length of the small side of the room?
- **5.** A grapefruit has a mass of 100 grams. A watermelon has a mass of 4 times the mass of the grapefruit. What is the mass of the watermelon, in centigrams?
- 6. Hannah ran 200 yards during recess. Juanita ran 340 yards during recess. In feet, how much further did Juanita run than Hannah?
- **7.** The perimeter of the rectangular shaped building is 960 ft. The shortest side of the building is 150 ft. What is the length of one of the longest sides of the building?

Solve Measurement Problems

Solve by any method. Then check your answer by rounding and estimating.

Name

**1.** 6)49

**2.** 4)502

### **3.** 6)3,781

### Use an equation to solve.

Remembering

4. Sydney bakes mini muffins for a bake sale. She bakes4 pans that hold 12 muffins each and 3 pans that hold18 muffins each. How many muffins does Sydney bake?

## Find the area and perimeter for rectangles with the lengths and widths shown.

<b>5.</b> <i>l</i> = 8 units	<b>6.</b> <i>l</i> = 2 units	<b>7.</b> <i>l</i> = 12 units
w = 7 units	w = 14 units	w = 3 units
A =	A =	_ A =
P =	P =	_ P =

8. Stretch Your Thinking Ms. Carpse writes the following problem on the board. A 20-foot length of ribbon is cut into 4 equal pieces. How many inches long is each piece of ribbon? Ashe says you should first divide 20 feet by 4, then convert to inches. Wesley says you should first convert 20 feet to inches, then divide by 4. Explain how both students are correct.

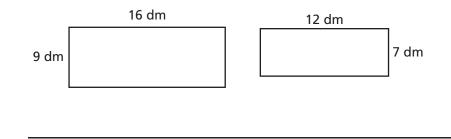




### Solve.

1. Yonni has a 5 gallon fish tank. He needs to change the water in the fish tank. How many cups of water will Yonni need to replace all the water in the fish tank?

- 2. Barry is building a fence around his backyard. The backyard is in the shape of a rectangle and the longest side of the yard is 20 meters. The fence will have a perimeter of 60 meters. How many meters long is the short side of the backyard?
- 3. Yesi's dog weighed 5 pounds when she got him. He now weighs 45 pounds. How much weight did Yesi's dog gain, in ounces?
- **4.** Fiona's family is replacing the carpet in their living room. The living room is in the shape of a square. The length of one wall is 16 feet. How many square feet of carpet does Fiona's family need to buy to replace their old carpet?
- 5. Trevon drew the two rectangles below. He wanted to know the difference between the areas of the two rectangles. What is the difference between the two areas?



Show Your Work.

**4.** 17

### Solve. Then explain the meaning of the remainder.

<b>1.</b> There are 43	students at a musical	
performance.	Each row in the	
auditorium h	as 8 seats. If the	
students fill s	eats row by row	
from front to	back, how many	
people are in	the last row?	
Write whether e	ach number is <i>prime</i> o	r composite.
<b>2.</b> 49	<b>3.</b> 31	

Solve.

Show your work.

- **5.** The perimeter of a postage stamp is 90 millimeters. The longer side of the stamp is 25 millimeters. What is the length of the shorter side?
- 6. Stretch Your Thinking The directions for lemonade say to put 2 cups of the liquid concentrate into 1 gallon of water. If Olivia only wants to make 1 pint of lemonade, how many fluid ounces of concentrate should she use? Explain.

Remembering

5-8



9.  $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$  \_\_\_\_\_ 10.  $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} =$  \_\_\_\_\_ 11.  $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} =$  \_\_\_\_\_ 12.  $\frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} =$  \_\_\_\_\_ 13.  $\frac{1}{12} + \frac{1}{12} =$  \_\_\_\_\_ 14.  $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} =$  \_\_\_\_\_ 15.  $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} =$  \_\_\_\_\_ 16.  $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} =$  \_\_\_\_\_

Write three things you learned today about fractions.

UNIT 6 LESSON 1

Name the fraction for each sum of unit fractions.

# 6-1 Nai

Write each fraction as a sum of unit fractions.

**1.**  $\frac{2}{4} =$  \_\_\_\_\_

**2.**  $\frac{5}{8} =$ \_\_\_\_\_

**3.**  $\frac{2}{6} =$  \_\_\_\_\_

**4.**  $\frac{7}{8} =$ \_\_\_\_\_

**5.**  $\frac{4}{12} =$ \_\_\_\_\_

**6.**  $\frac{6}{12} =$  \_\_\_\_\_

**7.**  $\frac{8}{12} =$ \_\_\_\_\_

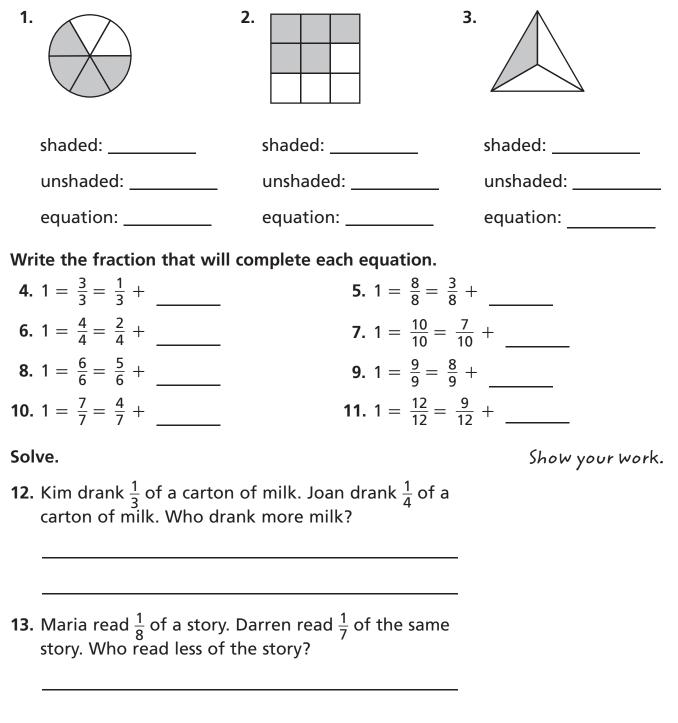
**8.**  $\frac{4}{5} =$ 



6-1 Name	Date	
Remembering		
Solve using any method and show Check your work with estimation.	your work.	
1. 2 × 87     2. 35 ×	< 64 <b>3.</b> 336 <u>× 8</u>	
Solve using any method.		
<b>4.</b> 5)481 <b>5.</b> 4)2,	<b>6.</b> 7)3,855	
Simplify each expression.		
<b>7</b> . (7 − 3) • 8 =	<b>8</b> . (6 ⋅ 3) ÷ (11 − 9) =	
<b>9.</b> 9 <i>t</i> – 3 <i>t</i> =	<b>10.</b> (12 <i>n</i> – <i>n</i> ) + 5 <i>n</i> =	
<b>11. Stretch Your Thinking</b> Kia has a long piece of ribbon. She cuts the ribbon in half then cuts each of those halves in half again. Draw the cut ribbon. Kia uses 3 of the cut pieces for wrapping bouquets of flowers. Write a sum of unit fractions and the total to show the amount of the ribbon she has used. What fraction represents the amount she has left over?		



Name the fraction of the shape that is shaded and the fraction of the shape that is not shaded. Then, write an equation that shows how the two fractions make one whole.



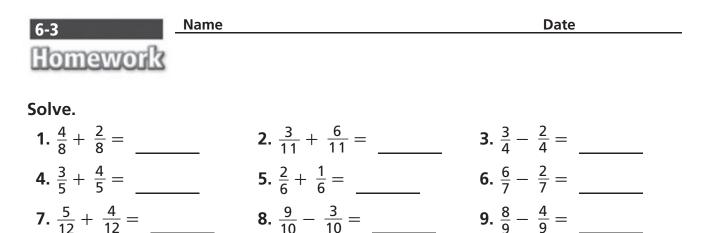
6-2 Name		Date
Remembering		
Write = or $\neq$ to make ea	ch statement true.	
1. 25 + 25 ) 50	<b>2.</b> 17 + 3 30 - 10	<b>3.</b> 9 + 8  8 + 9
<b>4.</b> 31 23 + 9	<b>5.</b> 3 + 1 + 12 15	<b>6.</b> 40 – 22 🔵 18
Solve each equation.		
<b>7.</b> 8 ÷ $b = 2$	<b>8.</b> <i>j</i> ÷ 6 = 7	<b>9.</b> <i>k</i> = 5 × 3
b =	j =	k =
<b>10.</b> <i>q</i> × 10 = 90	<b>11.</b> 12 × <i>r</i> = 36	<b>12.</b> <i>a</i> = 7 × 8
q =	r =	a =

Write each fraction as a sum of unit fractions.

<b>13.</b> $\frac{4}{6} =$	
<b>14.</b> $\frac{6}{8} =$	

**15. Stretch Your Thinking** Margaret and June both made a pumpkin pie of the same size. Each cut her pie into equal pieces. Margaret's whole pie can be represented by the fraction  $\frac{8}{8}$ . June's whole pie can be represented by the fraction  $\frac{6}{6}$ . What is different about the two pies? If Margaret and June each eat 1 piece of their own pie, who will eat more? Explain how you know.

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### Solve.

- 10. Sue is driving to see her mom. The first day she traveled  $\frac{2}{5}$  of the distance. The next day she traveled another  $\frac{2}{5}$  of the distance. What fraction of the distance has she driven?
- **11.** When Keshawn sharpens her pencil, she loses about  $\frac{1}{12}$  of the length. One day, she sharpened her pencil 3 times. The next day she sharpened the same pencil 5 times. What fraction of the pencil did Keshawn sharpen away?
- **12.** One day, a flower shop sold  $\frac{7}{10}$  of its roses in the morning and  $\frac{2}{10}$  of its roses in the afternoon. What fraction of its roses did the shop sell that day?
- **13.** Bonnie's orange was cut into eighths. She ate  $\frac{3}{8}$  of the orange and her friend ate  $\frac{3}{8}$  of it. Did they eat the whole orange? Explain.
- 14. Write and solve a fraction word problem of your own.

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Show your work.

### Add and Subtract Fractions with Like Denominators

### Name

### Solve the comparison problem.

**1.** There are 108 cars parked in front of a building. This is 4 times the number of cars that are parked in the back of the building. How many cars are parked in the back of the building?

### Write a number sentence to answer each question.

- 2. How many millimeters are equal to 8 meters?
- 3. How many centimeters are equal to 35 kilometers?
- 4. How many meters are equal to 72 kilometers?

Name the fraction that will complete each equation.

**5.**  $1 = \frac{6}{6} = \frac{4}{6} +$ \_\_\_\_\_ **6.**  $1 = \frac{10}{10} = \frac{1}{10} +$ \_\_\_\_\_

**7.** 
$$1 = \frac{3}{3} = \frac{2}{3} +$$
 **8.**  $1 = \frac{8}{8} = \frac{4}{8} +$ 

9. Stretch Your Thinking Lilly started the morning with a glass of juice that was  $\frac{4}{5}$  full. She drank  $\frac{3}{5}$  of the glass, then partially refilled with another  $\frac{2}{5}$  of a glass. At this point, how full is Lilly's glass with juice? Explain your answer.



Remembering

6-3

Date

6-4 Homework

Write the equivalent fraction.

- **1.**  $6\frac{2}{5} =$  \_\_\_\_\_ **3.**  $4\frac{6}{7} =$  \_\_\_\_\_ **5.**  $3\frac{7}{10} =$  \_\_\_\_\_ **7.**  $7\frac{3}{4} =$  \_\_\_\_\_
- **2.**  $2\frac{3}{8} =$  \_\_\_\_\_ **4.**  $8\frac{1}{3} =$  \_\_\_\_\_ **6.**  $5\frac{5}{6} =$  \_\_\_\_\_ **8.**  $1\frac{4}{9} =$  \_\_\_\_\_

Write the equivalent mixed number.



### Solve.

Show your work.

**17.** Castor brought  $6\frac{3}{4}$  small carrot cakes to share with the 26 students in his class. Did Castor bring enough for each student to have  $\frac{1}{4}$  of a cake? Explain your thinking.

18. Claire cut some apples into eighths. She and her friends ate all but 17 pieces. How many whole apples and parts of apples did she have left over? Tell how you know.

6-4 Name	Date
Remembering	
Write and solve an equation to solve each pro Draw comparison bars when needed.	blem. Show your work.
<b>1.</b> Brigitte fostered 14 dogs this year, which is salast year. How many dogs did Brigitte foster	
2. Rema has two jobs. In one year, she worked at her first job. In the same year, she worked number of hours at her second job. How ma Rema work that year at her second job?	d 3 times the
Complete.	
3. How many milliliters are equal to 21 L?	
4. How many milligrams are equal to 9 g?	
5. How many grams are equal to 400 kg?	
Solve.	
<b>6.</b> $\frac{3}{4} - \frac{1}{4} = $ <b>7.</b> $\frac{2}{9} + \frac{3}{9} = $	<b>8.</b> $\frac{7}{8} - \frac{1}{8} =$
<b>9. Stretch Your Thinking</b> Harrison says that to number to a fraction greater than 1, he thin $4\frac{2}{5} = \frac{5}{5} + \frac{5}{5} + \frac{5}{5} + \frac{5}{5} + \frac{2}{5} = \frac{22}{5}$ . Does his strate	nks of it this way:

6-5	Name	Date
Homework		
Add.		
<b>1.</b> 3 $\frac{2}{6}$	<b>2.</b> $8\frac{5}{10}$	<b>3.</b> $7\frac{3}{4}$
<b>1.</b> $3\frac{2}{6}$ + $6\frac{3}{6}$	$+ 9\frac{6}{10}$	<b>3.</b> $7\frac{3}{4}$ + $4\frac{2}{4}$
<b>4.</b> 1 <sup>5</sup>	5. $3\frac{2}{5}$	6. $1\frac{2}{8}$
<b>4.</b> $1\frac{5}{9}$ + $5\frac{7}{9}$	5. $3\frac{2}{5}$ + $3\frac{3}{5}$	6. $1\frac{2}{8}$ + $2\frac{5}{8}$
Subtract.		
<b>7.</b> $7\frac{2}{3}$	8. $8\frac{2}{7}$ - $5\frac{5}{7}$	9. $6\frac{1}{4}$ - $2\frac{3}{4}$
$-3\frac{1}{3}$	$-5\frac{5}{7}$	$-2\frac{3}{4}$
<b>10.</b> 9 $\frac{1}{8}$	<b>11.</b> 9 $\frac{4}{6}$	<b>12.</b> 3 $\frac{1}{5}$
$-4\frac{5}{8}$	$-4\frac{1}{6}$	$-2\frac{3}{5}$
Add or subtract.		
<b>13.</b> $\frac{1}{4} + \frac{7}{4} =$	<b>14.</b> $\frac{3}{8} + \frac{6}{8} =$	<b>15.</b> $\frac{9}{6} - \frac{8}{6} =$
<b>16.</b> $\frac{5}{9} + \frac{6}{9} =$	<b>17.</b> $\frac{9}{2} - \frac{6}{2} =$	<b>18.</b> $\frac{5}{10} - \frac{2}{10} =$
<b>19.</b> $\frac{2}{5} + \frac{4}{5} =$	<b>20.</b> $\frac{8}{7} - \frac{3}{7} =$	<b>21.</b> $\frac{7}{3} - \frac{2}{3} =$

UNIT 6 LESSON 5

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Add and Subtract Mixed Numbers with Like Denominators

## Remembering

6-5

### The graph shows the number of miles Matt ran during a week of training for a marathon. Use the graph for Exercises 1–2.

- 1. On which day did Jason run 3 times the number of miles as he ran on Monday?
- 2. Write an addition equation and a subtraction equation that compares the number of miles Matt ran on Thursday (x) to the number of miles Jason ran on Tuesday (y).

### Convert each measurement.

- **3.** 4 min = \_\_\_\_\_ sec
- **5.** 5 days = \_\_\_\_\_ hrs

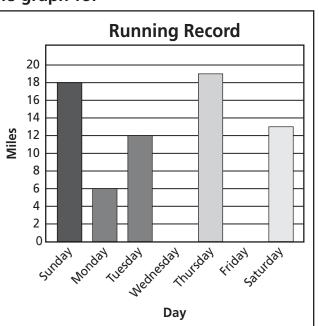
### Write the equivalent mixed number.

**7.**  $\frac{9}{4} =$  \_\_\_\_\_

**10.**  $\frac{11}{2} =$  **11.**  $\frac{14}{4} =$ 

**13. Stretch Your Thinking** Garrett picked  $12\frac{7}{8}$  pounds of peaches. Elise picked  $13\frac{3}{8}$  pounds of peaches. Who picked more peaches? How much more? Explain.

**8.**  $\frac{12}{3} =$  \_\_\_\_\_







## **12.** $\frac{15}{6} =$



**9.**  $\frac{63}{10} =$  \_\_\_\_\_

Date

6-6 Homework

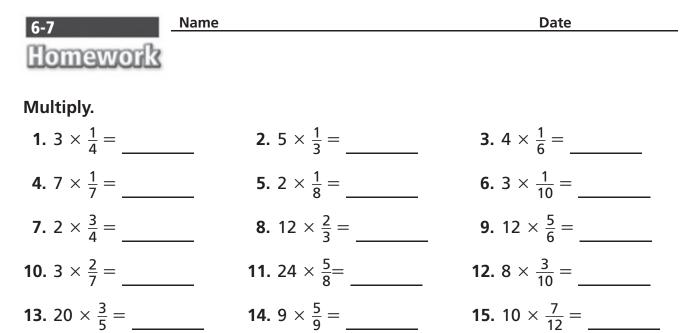
Write each mixed number as a fraction.

- 1.  $6\frac{5}{8} =$ \_\_\_\_\_ **2.**  $2\frac{1}{4} =$  \_\_\_\_\_ **4.**  $4\frac{2}{6} =$  \_\_\_\_\_ **3.**  $8\frac{3}{10} =$ Write each fraction as a mixed number. **5.**  $\frac{26}{3} =$  \_\_\_\_\_ **6.**  $\frac{47}{7} =$  \_\_\_\_\_ **8.**  $\frac{44}{5} =$ \_\_\_\_\_ **7.**  $\frac{59}{9} =$  \_\_\_\_\_ Add or subtract. **9.**  $\frac{2}{3} + \frac{2}{3} =$  **10.**  $\frac{5}{7} - \frac{3}{7} =$  **11.**  $1\frac{3}{9} + \frac{7}{9} =$ **12.**  $\frac{3}{4} + 3\frac{3}{4} =$  **13.**  $2\frac{4}{15} - \frac{10}{15} =$  **14.**  $\frac{15}{20} - \frac{6}{20} =$ **15.**  $3\frac{3}{5} - 3\frac{1}{5} =$ **16.**  $1\frac{1}{6} + 2\frac{2}{6} =$  **17.**  $2\frac{7}{8} - 1\frac{2}{8} =$ Show your work. Solve.
- **18.** Rashid made a loaf of bread that called for  $3\frac{1}{3}$  cups of flour. He combined white flour and whole wheat flour. If he used  $1\frac{2}{3}$  cups of white flour, how much whole wheat flour did he use?
- **19.** Manuela spent  $1\frac{3}{4}$  hours writing her book report. Katy spent  $\frac{3}{4}$  hour more time on her book report than Manuela spent. How much time did Katy spend writing her report?

6-6	Name				Date	
Remem	bering					
Add or sub	tract.					
<b>1.</b> 23,54 + 3,19		<b>2.</b> 50, <u>- 27</u> ,	427 152	3.	850,000 - 541,086	
Use an equ	ation to solve				Show	your work.
each da day. Ho	Caroline's 2 o y. Her younge w much food her each day?	r cat gets 9	ounces of	f food each	_	
and him collectio	ares his 84 toy nself. Then he on. How many	donates 15	cars to a	used toy	s -	
Add.				_		
6. $3\frac{4}{9}$ + $5\frac{2}{9}$	7.	$7\frac{1}{5}$ + $2\frac{2}{5}$	8.	9 <u>/</u> 10	9.	$5\frac{2}{7}$
$+5\frac{2}{9}$		$+ 2\frac{2}{5}$		$+ 8\frac{4}{10}$	-	+ 2 <u>°</u>

10. Stretch Your Thinking Chris ordered pizza for his family from a company that cuts its pizzas into 8 slices each. The fraction of a pizza eaten by each family member is shown in the table at the right. If they had less than 1 whole pizza left over, how many pizzas did they order? What fraction of a pizza was left over? Show your work.

Family member	Fraction of pizza eaten
Chris	<u>3</u> 8
Stacy	<u>2</u> 8
Rylan	<u>4</u> 8
Alec	<u>5</u> 8
Kelli	3 8



### Solve.

Show your work.

- **16.** Manuel eats  $\frac{1}{8}$  of a melon for a snack each day. How much melon does he eat in five days?
- **17.** Shannen collects paper for recycling. She collects  $\frac{1}{3}$  pound of paper each week. How much paper will she collect in 4 weeks?
- **18.** Aisha is unpacking boxes. It takes  $\frac{3}{4}$  hour to unpack each box. How long will it take her to unpack 6 boxes?
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  - 19. Mrs. Suarez cut a pizza into 8 equal slices. Each person in her family ate 2 slices. If there are 3 people in her family, what fraction of the pizza did they eat altogether?
  - **20.** Hailey is knitting a scarf. Each half hour, she adds  $\frac{3}{7}$  inch to the scarf's length. How much length will she add to the scarf in 12 hours?

Use an equation to solve.

Remembering

6-7

1. Camille bought 2 pairs of pants for \$29 each and a shirt for \$18. She paid with \$80. How much did she get in change?

Name

2. On a weekend road trip, the Jensen family drove 210 miles on highways, where their car gets 35 miles for each gallon of gasoline, and 54 miles on city streets, where their car gets 18 miles for each gallon. How many gallons of gas did they use?

### Complete the tables.

3.	Yards	Feet	4.	Feet	Inches
	2			3	
	5			4	
	8			9	
	10			12	

### Add or subtract.

- **6.**  $\frac{2}{5} + \frac{4}{5} =$ \_\_\_\_\_ 5.  $\frac{9}{10} - \frac{3}{10} =$ \_\_\_\_\_ 7.  $2\frac{1}{8} + 5\frac{3}{8} =$ \_\_\_\_\_ **10.**  $7\frac{1}{4} - 4\frac{3}{4} =$ **9.**  $4\frac{3}{6} + 1\frac{5}{6} =$ 8.  $8\frac{6}{7} - 8\frac{2}{7} =$
- **11. Stretch Your Thinking** A worm moves forward  $\frac{3}{8}$  inch every 5 minutes for 1 hour 25 minutes. How far does the worm move in this time? Explain.

Show your work.

6-8

Homework

Date

Draw a model for each problem. Then solve.

1. 
$$4 \cdot \frac{1}{5} =$$
 2.  $7 \cdot \frac{1}{3} =$ 

 3.  $2 \cdot \frac{3}{8} =$ 
 4.  $5 \cdot \frac{3}{4} =$ 

 Multiply.
 4.  $5 \cdot \frac{3}{4} =$ 

 5.  $12 \cdot \frac{5}{6} =$ 
 6.  $9 \cdot \frac{1}{2} =$ 

 7.  $25 \cdot \frac{3}{7} =$ 
 8.  $12 \cdot \frac{4}{5} =$ 

 9.  $5 \cdot \frac{2}{12} =$ 
 10.  $9 \cdot \frac{2}{3} =$ 

Write an equation. Then solve.

Show your work.

- **11.** Cal's shoe is  $\frac{3}{4}$  foot long. He used his shoe to measure his bedroom and found that it was 15 shoes long. What is the length of Cal's room in feet?
- 12. The cafeteria at a summer camp gives each camper  $\frac{2}{3}$  cup of juice for breakfast. This morning, 50 campers had juice for breakfast. How much juice did the cafeteria serve in all?

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6-8 Name Remembering	Date
Solve each problem.	
<b>1.</b> $24 \div 8 + 9 = h$	<b>2.</b> $(14 \div 2) - (3 \times 2) = l$
<b>3.</b> $20 - (5 \times 4) = p$	<b>4.</b> $(2 \times 9) + 9 = g$
<b>5.</b> $(3 + 7) \times (2 + 4) = m$	<b>6.</b> $(9 \div 3) + (5 - 4) = t$
Solve.	Show your work.

- 7. A baby weighs 7 pounds 2 ounces at birth. How many ounces does the baby weigh?
- **8.** Jack bought 2 quarts of motor oil. His car took 1 quart and another half quart. How many cups of oil does he have left?

### Multiply.

- **9.**  $6 \times \frac{1}{7} =$  **10.**  $5 \times \frac{3}{8} =$  **11.**  $2 \times \frac{9}{10} =$
- **12.**  $8 \times \frac{3}{4} =$  \_\_\_\_\_ **13.**  $3 \times \frac{1}{3} =$  \_\_\_\_ **14.**  $15 \times \frac{3}{11} =$  \_\_\_\_\_
- **15. Stretch Your Thinking** Write a word problem using the whole number 4 and the fraction  $\frac{3}{8}$ . Then solve your problem.

6-9	Name	Date
Homework		
Add or subtract.		
1. $2\frac{2}{3}$	<b>2.</b> $9\frac{7}{9}$	<b>3.</b> $5\frac{4}{5}$
$+ 4\frac{1}{3}$	<b>2.</b> $9\frac{7}{9}$ - $4\frac{5}{9}$	$+ 7\frac{3}{5}$
3	9	5
<b>1</b> 8	<b>5</b> 18 <sup>5</sup>	6 10 <sup>1</sup>
4. 0		
$-1\frac{1}{6}$	$+ 12\frac{7}{8}$	$-3\frac{3}{4}$
<b>4.</b> 8 $- 1\frac{1}{6}$	5. $18\frac{5}{8}$ + $12\frac{7}{8}$	6. $10\frac{1}{4}$ - $3\frac{3}{4}$

# Multiply. Write your answer as a mixed number or a whole number, when possible.

**7.**  $5 \cdot \frac{1}{5} =$  **8.**  $5 \cdot \frac{4}{7} =$  **9.**  $20 \cdot \frac{3}{10} =$ 

**10.**  $8 \cdot \frac{1}{6} =$  \_\_\_\_\_ **11.**  $9 \cdot \frac{7}{12} =$  \_\_\_\_ **12.**  $2 \cdot \frac{4}{9} =$  \_\_\_\_\_

# Write an equation. Then solve.

**13.** At the science-club picnic  $\frac{2}{3}$  cup of potato salad will be served to each student. If 20 students attend the picnic, how much potato salad will be needed?

**14.** Skye spent  $4\frac{2}{6}$  hours reading over the weekend. If she read  $1\frac{5}{6}$  hours on Saturday, how long did she read on Sunday?

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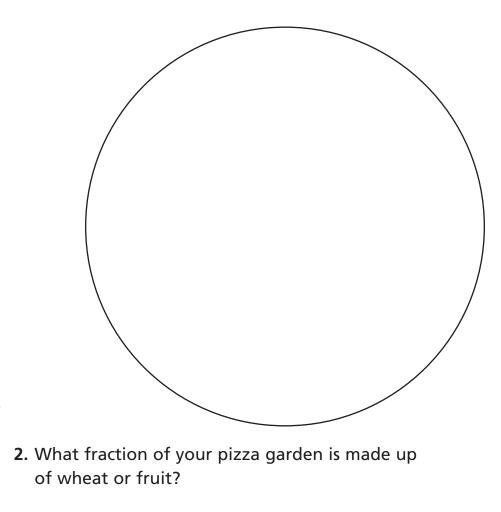
Show your work.

6-9	Name		Date	
Remembe	ring			
Tell whether 3	is a factor of each n	umber. Write <i>yes</i>	or no.	
<b>1.</b> 12	2.14	<b>3.</b> 38	<b>4.</b> 51	
Tell whether ea	ach number is a mult	iple of 6. Write y	es or no.	
<b>5.</b> 46	<b>6.</b> 54	<b>7.</b> 21	<b>8.</b> 30	
Find the area a and widths sho	nd perimeter for rec	tangles with the	lengths	
<b>9.</b> <i>l</i> = 7 units	<b>10</b> . / = 2	2 units	<b>11.</b> <i>I</i> = 7 units	
w = 8 units	w = 2	1 units	w = 5 units	
A =	A = _		A =	
P =	P = _		P =	
Write an equat	ion. Then solve.		Show you	r work.
	$cs \frac{3}{4}$ mile to school an miles does she walk			
	ostage stamp is 2 inc is the area of the st	0	ches	
has cut 14 k that is $2\frac{1}{4}$ ya	or <b>Thinking</b> For a wo boards that are each ards. What is the tot ow your work.	$\frac{3}{4}$ yard and one b	oard	

# 6-10 Homework

A pizza garden is a smaller version of a pizza farm. You can make a pizza garden at your home or in your community.

 Use the circle below to draw a vegetarian pizza garden with 8 wedges. In each wedge, show one of the following vegetarian ingredients: wheat, fruit, vegetables, Italian herbs, and dairy cows. Use each type of ingredient at least once.



**3.** What fraction of your pizza garden is *not* made up of vegetables?

Name

Use the rule to find the next five terms in the pattern.

**1.** 7, 14, 28, 56, ... **2.** 10, 18, 26, 34, ...

Rule: multiply by 2

Use the rule to find the first ten terms in the pattern.

3. First term: 3

Rule: multiply by 2

Rule: add 8

# Solve.

6-10

**4.** A rectangular vegetable garden is 10 yards by 7 yards. What is the perimeter of the garden in feet?

# Multiply. Change fractions greater than 1 to mixed numbers or whole numbers.

**5.**  $7 \cdot \frac{3}{5} =$  \_\_\_\_\_ **6.**  $12 \cdot \frac{1}{2} =$  \_\_\_\_\_ **7.**  $9 \cdot \frac{3}{10} =$  \_\_\_\_\_

8. Stretch Your Thinking The table shows the amount of snowfall, in inches, during the winter months last year and this year. How much would it have to snow in February this year for the total snowfall this winter to be the same as last winter? Show your work.

	Last Year			This Year	
Dec.	Jan.	Feb.	Dec.	Jan.	Feb.
$12\frac{7}{8}$	17 <u>1</u>	26 <u>3</u>	35 <u>5</u>	$11\frac{1}{8}$	?

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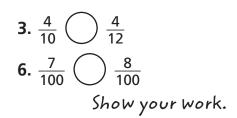


m	6	m	อ	W	n	ik
66	~	-	~		~	

Write > or < to make each statement true.

 1.  $\frac{1}{5}$   $\bigcirc$   $\frac{1}{4}$  2.  $\frac{6}{10}$   $\bigcirc$   $\frac{5}{10}$  

 4.  $\frac{3}{5}$   $\bigcirc$   $\frac{4}{5}$  5.  $\frac{3}{6}$   $\bigcirc$   $\frac{3}{8}$ 



# Solve. Explain your answers.

7. Juan took  $\frac{2}{12}$  of the fruit salad and Harry took  $\frac{3}{12}$  of the same salad. Who took more of the salad?

- **8.** Kim drank  $\frac{1}{3}$  of a carton of milk. Joan drank  $\frac{1}{4}$  of a carton. Who drank more?
- **9.** Maria read  $\frac{3}{8}$  of a story. Darren read  $\frac{3}{6}$  of the same story. Who read more of the story?

**10.** Write 2 things you learned today about comparing fractions.

11. Write and solve a fraction word problem of your own.

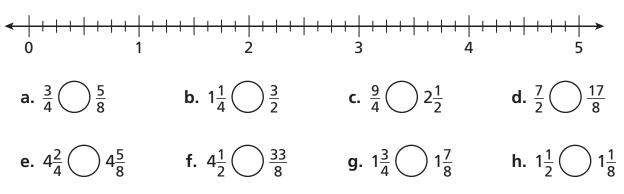
7-1	Name	Date
Rememberth	0	
Divide.		
<b>1.</b> 6)273	<b>2.</b> 2)1,935	<b>3.</b> 7)812

Write = or $\neq$ to make each statement true.								
<b>4.</b> 16 – 4 🔵 2	<b>5.</b> 20 + 8 30 - 2	<b>6.</b> 9 – 4 🔵 12						
<b>7.</b> 48 24 + 24	<b>8.</b> 50 + 3 + 8 71	<b>9.</b> 13 + 15 15 + 13						
Solve each equation.								
<b>10.</b> 18 ÷ <i>s</i> = 9	<b>11.</b> <i>m</i> = 8 × 4	<b>12.</b> <i>p</i> ÷ 10 = 7						
s =	<i>m</i> =	p =						
<b>13.</b> <i>t</i> × 12 = 60	<b>14.</b> 3 × <i>y</i> = 18	<b>15.</b> <i>j</i> = 42 ÷ 6						
t =	<i>y</i> =	<i>j</i> =						

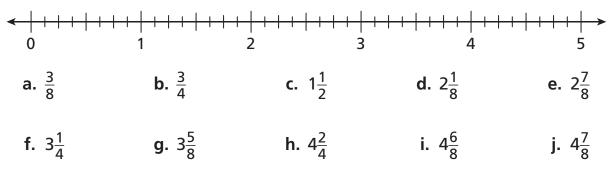
**16. Stretch Your Thinking** Ellen, Fern, and Kyle are all drinking milk from the same size cartons in the cafeteria. Ellen's carton is  $\frac{3}{7}$  full. Fern's carton is  $\frac{3}{10}$  full. Kevin's carton is  $\frac{3}{4}$  full. Who has the least milk left in their carton? Explain how you know.



1. Use the number line to compare the fractions or mixed numbers. Write > or < to make the statement true.



**2.** Mark and label the letter of each fraction or mixed number on the number line.



The list below shows the amount of fruit purchased from the market.

Fruit Purchases (lb = pounds)

apples $2\frac{1}{8}$ lb	bananas 2 <u>3</u> lb
grapes $2\frac{2}{3}$ lb	oranges 3 <mark>1</mark> lb

3. Decide if each weight is closer to 2 pounds, 2<sup>1</sup>/<sub>2</sub> pounds, or 3 pounds. Write closer to 2 pounds, closer to 2<sup>1</sup>/<sub>2</sub> pounds, or closer to 3 pounds.
a. apples \_\_\_\_\_\_\_ b. bananas \_\_\_\_\_\_
c. grapes \_\_\_\_\_\_ d. oranges \_\_\_\_\_\_

- **4.** Which purchase had a greater weight?
  - a. apples or grapes \_\_\_\_\_\_
     b. oranges or bananas \_\_\_\_\_

# Remembering

# Solve, using any method.

1. 8)1,219

7-2

2. 3)7,149

**3.** 4)4,038

Date

# Solve each comparison problem.

- 4. Mateo read 2,382 pages in a book series over the summer. This is 3 times the number of pages as his younger brother read over the summer. How many pages did Mateo's brother read over the summer?
- 5. In Jen's town, there was 9 inches of snow in a year. In her cousin's town, there was 216 inches of snow in the same year. How many times the number of inches of snow was there in the cousin's town as in Jen's town?

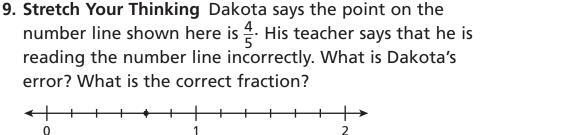
# Write < or > to make each statement true.

error? What is the correct fraction?

1

6.  $\frac{2}{5}$ 

0



**8.**  $\frac{4}{5}$ 



Homework

- 1. Draw a small square, a medium square, and a large square. Shade  $\frac{1}{6}$  of each.
- **2.** Draw a small circle, a medium circle, and a large circle. Shade  $\frac{3}{4}$  of each.
- **3**. Draw a short rectangle, a medium rectangle, and a long rectangle. Shade  $\frac{3}{5}$  of each.
- Look at the different size shapes you shaded in Problems 1–3. Describe what they show about fractions of different wholes.

# Solve.

Show your work.

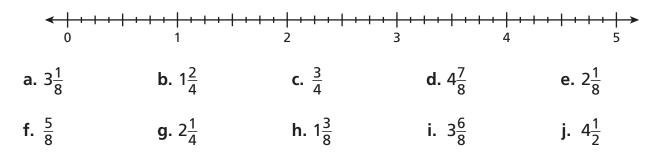
- **5.** Kris ate  $\frac{3}{8}$  of a pizza and Kim ate  $\frac{4}{8}$  of the same pizza. Did they eat the whole pizza? Explain.
- **6.** Amena ate  $\frac{1}{2}$  of a sandwich. Lavonne ate  $\frac{1}{2}$  of a different sandwich. Amena said they ate the same amount. Lavonne said Amena ate more. Could Lavonne be correct? Explain your thinking.



<b>1.</b> 8,159	<b>2.</b> 54,992	<b>3.</b> 625,000
+2,713	+ 8,317	- 139,256

# Use an equation to solve.

- 4. Chad harvested 39 potatoes from his garden. He kept 11 for himself and shared the remaining potatoes evenly among his 4 neighbors. How many potatoes did each neighbor get?
- 5. Mark and label the point for each fraction or mixed number with its letter.



6. Stretch Your Thinking Raylene made a bracelet with 28 beads. She also made a necklace with twice the number of beads as the bracelet. If  $\frac{1}{2}$  of the beads on the bracelet are green and  $\frac{1}{4}$  of the beads on the necklace are green, does the bracelet, the necklace, or neither have more green beads? Explain.

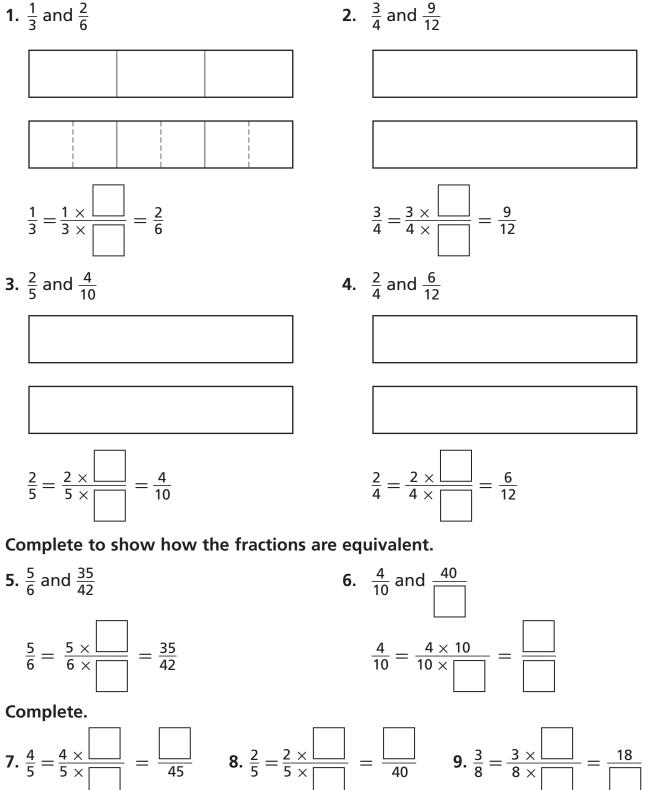
Date





Use the fraction strips to show how each pair is equivalent.

**1.**  $\frac{1}{3}$  and  $\frac{2}{6}$ 



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### Name

# Remembering

# Solve. Then explain the meaning of the remainder.

 Doris is putting together gift bags. She has 53 favors to divide evenly among gift bags for 7 guests. How many favors will each guest get?

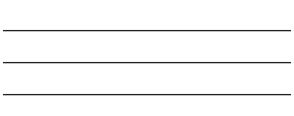
# Solve each problem.

**2.**  $2 \times 9 + 5 = r$ 

Solve.

4. Mattie and Leah each bought an ice cream cone for the same price. Mattie said it cost her  $\frac{2}{3}$  of her allowance. Leah said it cost her  $\frac{1}{3}$  of her allowance. Who gets more allowance? Explain.

5. Stretch Your Thinking Omar cuts a pizza into 4 slices and takes 3 of the slices. He says that he would have the same amount of pizza if he cut the pizza into 8 slices and takes 6 of the slices. Paul says he can cut the pizza into 16 slices and take 12 slices to have the same amount. Who is correct? Explain.



**3.**  $36 \div (20 - 8) = t$ 

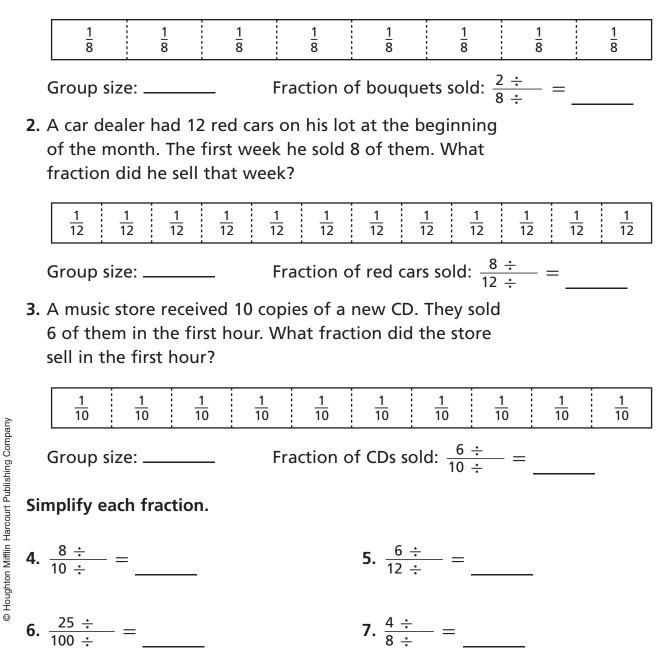
7-4



Homework

Shade the fraction bar to show the fraction of items sold. Group the unit fractions to form an equivalent fraction in simplest form. Show your work numerically.

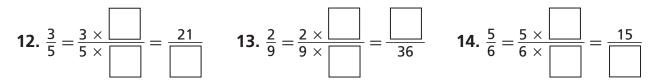
 The manager of Fantasy Flowers made 8 bouquets of wild flowers. By noon, she sold 2 of the bouquets. What fraction did she sell?



7-5	Name		Date				
Remembering							
Tell whether 4 is a factor of each number. Write <i>yes</i> or <i>no</i> .							
<b>1.</b> 12	<b>2.</b> 20	<b>3.</b> 10	<b>4.</b> 26				
Tell whether each	number is a multiple	of 3. Write yes or no.					
<b>5.</b> 15	<b>6.</b> 32	<b>7.</b> 27	<b>8.</b> 25				
Name the fraction for each sum of unit fractions.							
<b>9.</b> $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = $							

- **10.**  $\frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} =$ \_\_\_\_\_
- **11.**  $\frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} =$ \_\_\_\_\_

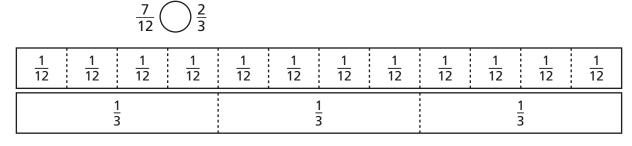
# Complete.



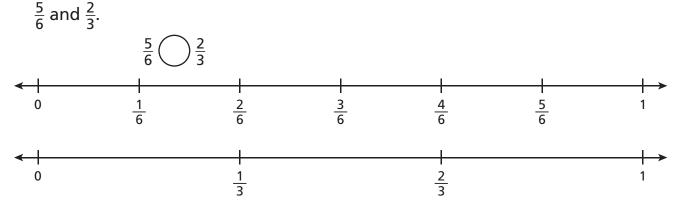
**15. Stretch Your Thinking** Explain two different ways to simplify  $\frac{6}{12}$ .



1. Use the fraction strips to compare the fractions  $\frac{7}{12}$  and  $\frac{2}{3}$ .



2. Use the number lines to compare the fractions



Compare. Write >, <, or =.



**160** UNIT 7 LESSON 6

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Write a number sentence to answer each question.

- 1. How many meters are equal to 58 kilometers?
- 2. How many millimeters are equal to 17 centimeters?

Name the fraction that will complete each equation.

**3.**  $1 = \frac{4}{4} = \frac{1}{4} +$  **4.**  $1 = \frac{8}{8} = \frac{2}{8} +$  **5.**  $1 = \frac{6}{6} = \frac{1}{6} +$ 

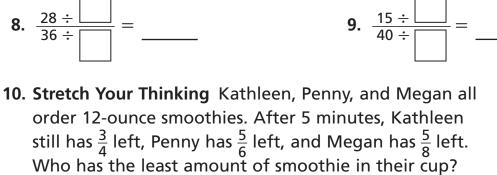
**7.**  $\frac{48 \div []}{56 \div []} = \_$ 

Simplify each fraction.

 $6. \quad \frac{12 \div \square}{15 \div \square} = \_$ 

Remembering

7-6



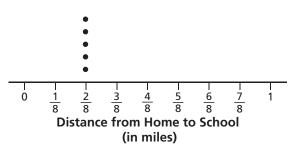
Who has the greatest? Explain.



Tyler asked his classmates the distance in miles from their home to the school. The distances they named are shown in the table.

Distance from Home to School (in miles)	Number of Students
<u>2</u> 8	5
<u>3</u> 8	3
$\frac{4}{8}$	4
<u>5</u> 8	5
<u>6</u> 8	3
$\frac{7}{8}$	7

1. Make a line plot of the data.



- **2.** How many students did Tyler ask in all? Explain how you know.
- **3.** Find the difference between the greatest distance and the least distance.
- 4. Layla lives the least distance from the school. Her friend Geneva lives  $\frac{3}{8}$  mile from her. Geneva walked to Layla's house. Then the two girls walked to school together. How far did Geneva walk altogether?



# Complete.

- 1. How many liters are equal to 39 kL? \_\_\_\_\_
- 2. How many milligrams are equal to 4 cg? \_\_\_\_\_

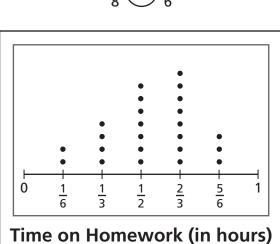
# Solve.

**3.**  $\frac{5}{9} + \frac{2}{9} =$  **4.**  $\frac{4}{6} - \frac{1}{6} =$  **5.**  $\frac{10}{11} - \frac{3}{11} =$ 

Use a common denominator to compare the fractions. Write <, =, or > to make a true statement.

- 6.  $\frac{9}{10}$   $\frac{2}{3}$  7.  $\frac{5}{8}$   $\frac{3}{5}$  8.  $\frac{2}{3}$   $\frac{5}{6}$  

   9.  $\frac{4}{14}$   $\frac{2}{7}$  10.  $\frac{4}{5}$   $\frac{4}{10}$  11.  $\frac{6}{8}$   $\frac{5}{6}$
- 12. Stretch Your Thinking Mr. Brady asked his students how long it took each of them to complete their homework from the previous night. He presented the results in the line plot shown. How many minutes did the greatest number of students take to do their homework? How many combined hours did those particular students spend on homework? Explain.



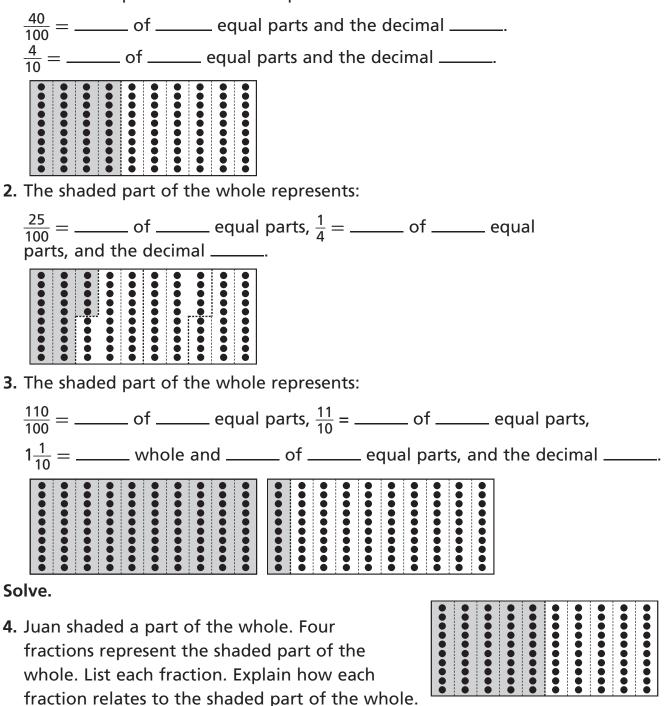
Date

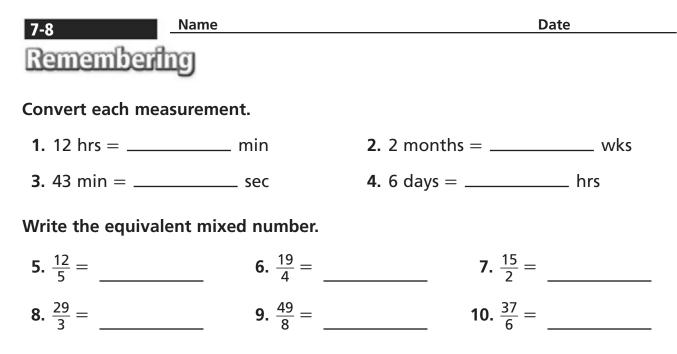
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Use the visual to fill in each blank.

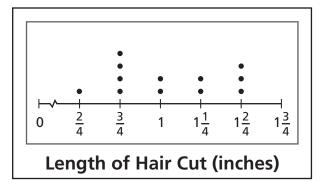
1. The shaded part of the whole represents:





The line plot shows how much hair Emmy had cut each time she went to the hair dresser this year. Use the line plot to answer Exercises 11–12.

- **11.** How many times did Emmy get her hair cut in the year?
- **12.** How much longer was the length of hair Emmy had cut most often than the length of hair she had cut least often?



**13. Stretch Your Thinking** Milo has 3 quarters in his right pocket and 8 dimes in his left pocket. Show the amount of money Milo has in each pocket as a sum of fractions and as a sum of decimals. In which pocket is there more money?

ore money?

7-9

Homework

Write a fraction and a decimal number to show what part of each bar is shaded.

1.	Fraction: _					Decim	al Numb	oer:		
2.	Fraction: _					Decim	al Numb	oer:		
Wr	ite these a	mou	nts as	decimal	numbe	rs.				
3.	5 tenths _			4. 9	hundre	edths		<b>5.</b> 56 h	undredt	hs
6.	80			<b>7.</b> –	<u>3</u> 0			<b>8.</b> $\frac{1}{100}$		
9.	3 cents		_	10. 2	2 quarte	rs		<b>11.</b> 3 nic	kels	
An	swer the q	uesti	ions b	elow.						
12.	lf you too them righ What deci	t, wł	nat de	cimal pa	rt woul	d that b	e?			
13.	If you had amount d amount d	id yo	u sper	nd?	Wh					
14.	If you hac decimal n in both te	umb	er did	you use	? Expres	s this nu	umber			
15.	If you had decimal p What deci left?	art o imal	f the t part o	rip did y	you trav	el?		nat		

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7-9	Name		Date
Remember	ling		
Convert.			
<b>1.</b> 7 ft =	in.	<b>2.</b> 4 mi =	yd
<b>3.</b> 15 yd =	ft	<b>4.</b> 2 yd =	in.
Add or subtract.			
5. $8\frac{4}{8}$	<b>6.</b> $1\frac{1}{3}$	<b>7.</b> $5\frac{11}{12}$	8. $8\frac{2}{5}$
$5.  8\frac{4}{8}$ $+2\frac{2}{8}$	$+7\frac{1}{3}$	$-1\frac{5}{12}$	8. $8\frac{2}{5}$ $-7\frac{4}{5}$

# Use the visual to fill in each blank.

9. The shaded part of the whole represents:

 70
 represents
 of
 equal parts

and the decimal \_\_\_\_\_.

7/10 represents \_\_\_\_\_\_ of \_\_\_\_\_ equal parts

and the decimal \_\_\_\_\_.

00	0000000	000000000000000000000000000000000000000	00000000	000000000000000000000000000000000000000	00000000000	
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**10. Stretch Your Thinking** Rosemary put 7 dimes and 3 pennies in a tip jar at the café. Show this amount as a decimal and as a fraction. How much more change would Rosemary have to put in the tip jar to make a whole dollar?

# 7-10 Homework

Write the decimal numbers that come next.

<b>1.</b> 0.05	0.06	0.07				
<b>2.</b> 0.26	0.27	0.28				
<b>3.</b> 0.3	0.4	0.5				
Write each	number	in decim	al form.			
<b>4.</b> 9 tent	hs	_ <b>5.</b> 5	hundredth	s	<b>6.</b> 29 hundr	redths
<b>7</b> . $\frac{73}{100}$ —		<b>8.</b> $\frac{1}{1}$	<u>2</u>		<b>9.</b> $\frac{8}{100}$	
<b>10.</b> 4 penr	nies	<b> 11.</b> 3	quarters		<b>12.</b> 6 dimes a	and 1 nickel

# Solve.

A small jar contains 4 white gumballs and 6 red gumballs.

- **13.** What decimal number shows which part of the gumballs are red? \_\_\_\_\_
- **14.** What decimal number shows which part of the gumballs are white? \_\_\_\_\_
- **15.** A large jar of 100 gumballs has the same fractions of red gumballs and white gumballs as the small jar. How many gumballs in the large jar are red? \_\_\_\_\_ How many are white? \_\_\_\_\_

A sidewalk has 100 squares. There are cracks in 9 of the squares.

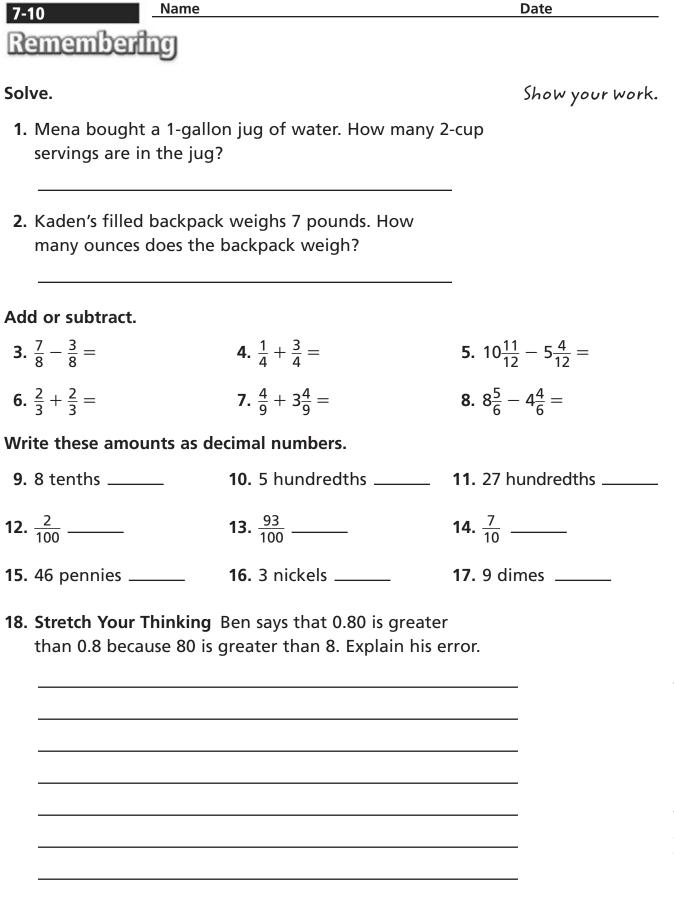
- **16.** What decimal number shows what part of the sidewalk is cracked? \_\_\_\_\_
- 17. What fraction shows what part of the sidewalk
  - is cracked? \_\_\_\_\_

Write each decimal tenth as a decimal hundredth.

**18.** 0.6 = \_\_\_\_ **19.** 0.2 = \_\_\_\_ **20.** 0.5 = \_\_\_\_

UNIT 7 LESSON 10

Compare Decimal Numbers to Hundredths 167



Homework

7-11

# Write each number in decimal form. **1.** 6 tenths \_\_\_\_\_ 2. 85 hundredths \_\_\_\_\_ 3. 9 hundredths **5.** $\frac{4}{100}$ \_\_\_\_\_ **6.** $2\frac{9}{10}$ \_\_\_\_\_ **4.** 7 tenths \_\_\_\_\_ **7.** $\frac{23}{10}$ \_\_\_\_\_ **8.** $11\frac{3}{100}$ \_\_\_\_\_ 9. 6 cents \_\_\_\_\_ **10.** twelve and 5 tenths \_\_\_\_\_ 11. thirty and 25 hundredths \_\_\_\_\_ Write each decimal in expanded form. **12**. 27.9 \_\_\_\_\_ **13.** 153.76 \_\_\_\_\_ **14.** 203.06 \_\_\_\_\_ Use the graph to answer questions 15–17. 15. What decimal part of all the melons did Amy Amy pick? \_\_\_\_\_ Joey 16. What decimal part of all the melons did Lisa Paco pick? \_\_\_\_\_ Paco 17. What decimal part of all the melons did Joey and Lisa pick together? \_\_\_\_\_ Solve. **18.** A centipede has 100 legs. What decimal part is one leg? \_\_\_\_\_ 19. At a banquet, each cake was cut into 100 pieces. The guests ate 4 whole cakes and all but one piece of another. What decimal number represents the number of cakes that were eaten? \_\_\_\_\_ 20. Miguel earned \$10 and saved \$3. What decimal part did he save?

21. Jing earned \$100, and saved \$30. What decimal part did she save? \_\_\_\_\_

**Melons Picked** Key: ( = 1 melon

7-11 Nam	10	Date
Remembering		
Add or subtract.		
<b>1</b> . 5,000	<b>2.</b> 286,361	<b>3.</b> 863,542
- 3,296	+ 45,743	- 794,815
Multiply.		
<b>4.</b> 4 × $\frac{1}{5}$ =	<b>5.</b> 9 × $\frac{2}{3}$ =	<b>6.</b> 3 $\times \frac{7}{8} =$
<b>7.</b> 2 × $\frac{5}{12}$ =	<b>8.</b> 5 × $\frac{6}{7}$ =	<b>9.</b> 7 × $\frac{9}{10}$ =
Write the decimal num	ibers that come next.	
<b>10.</b> 0.03 0.04 0.05		
<b>11.</b> 0.2 0.3 0.4		
<b>12.</b> 0.75 0.76 0.77		
Write each decimal ter	nth as a decimal hundred <sup>.</sup>	th.
<b>13.</b> 0.4 =	<b>14.</b> 0.9 =	<b>15.</b> 0.1 =
<b>16.</b> 0.3 =	<b>17.</b> 0.5 =	<b>18.</b> 0.7 =
5.2 grams. A handf	ing A handful of papercl ful of push pins is 500 cen ghs more? Explain.	

7-12

Write these amounts as decimal numbers.

1. 4 tenths	2. 72 hundredths	3. 6 hundredths
	<b>5.</b> $\frac{68}{100}$	<b>6.</b> $9\frac{4}{10}$
<b>7</b> . $\frac{16}{100}$	<b>8.</b> 6 <sup>7</sup> / <sub>100</sub>	<b>9.</b> 30 hundredths

Circle the number that does not have the same value as the others.

<b>10.</b> 0.95	0.950	0.905	<b>11.</b> 0.2	0.20	0.02
<b>12.</b> 0.730	0.703	0.73	<b>13.</b> 1.6	1.60	1.06
<b>14.</b> 0.59	5.90	<u>59</u> 100	<b>15.</b> 0.08	0.008	0.080

Write >, <, or = to compare these numbers.

<b>16.</b> 4.67 12.7	<b>17</b> . 0.35 O 0.4	<b>18.</b> 4.58 1.25	19. 8.3 0.83
<b>20.</b> 0.92 0.91	<b>21.</b> 2.3 0.84	<b>22.</b> 10.1 10.01	<b>23.</b> 7.4 0.74

The table shows how far four students jumped in the long jump contest. Use the table to answer the questions. 24. Whose jump was longest? \_\_\_\_\_ 25. Whose jump was shortest? \_\_\_\_\_

26. Which two students jumped the same distance? \_\_\_\_\_

Long Jump Contest			
Name	Length of Jump		
Joshua	1.60 meters		
Amanda	1.59 meters		
Hester	1.7 meters		
Miguel	1.6 meters		

_	-12 Rememberin	Name	Date
Cl	noose a measurem	ent unit for each rectan erimeter. Show your wo	•
1.	11 by 8 	2. 5 by 9	<b>3.</b> 2 by 6
Μ	ultiply.		
4.	$5 \cdot \frac{2}{3} = $	5.	$12 \cdot \frac{1}{5} = \underline{\qquad}$
6.	$8 \cdot \frac{4}{7} = $		$6 \cdot \frac{3}{8} = $
So	olve.		
8.	picnic, 3 whole b	ings in a bag of pretzels ags are eaten and 7 serv al number represents th hat are eaten?	ings of another
9.	any decimal num You can tell whic first in the diction from left to right	king Lance says that yo bers the way that you al h number is less (or whic hary) by comparing each . Is Lance's thinking corr le to explain your reason	phabetize words. ch word comes digit (or letter) ect? Give a

Write >, <, or = to compare these numbers.

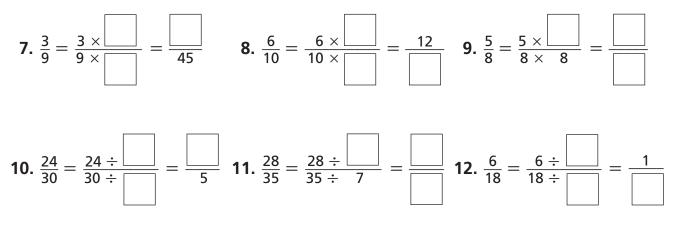
 1.  $\frac{3}{4} \bigcirc \frac{2}{8}$  2.  $\frac{4}{10} \bigcirc \frac{4}{5}$  3.  $1\frac{3}{6} \bigcirc 2\frac{3}{6}$  

 4.  $1\frac{1}{6} \bigcirc 1\frac{1}{4}$  5.  $2\frac{7}{8} \bigcirc 2\frac{3}{7}$  6.  $1\frac{4}{9} \bigcirc 1\frac{5}{10}$ 

Complete.

7-13

Homework

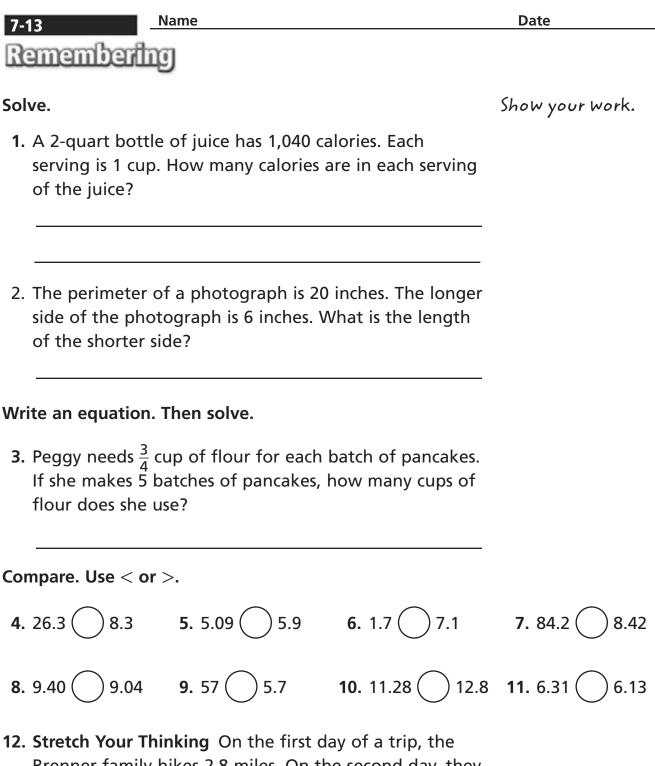


# Solve.

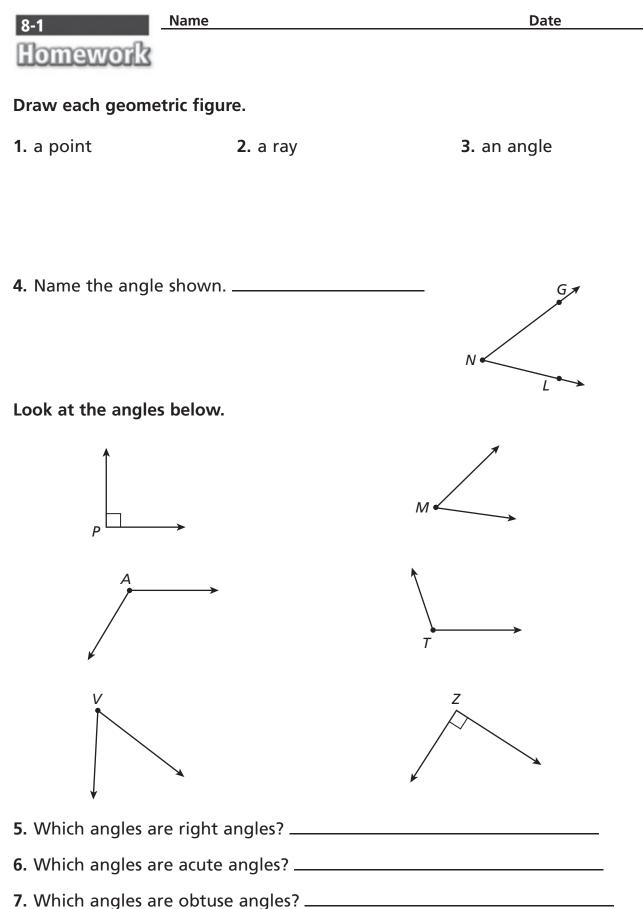
Show your work

- 13. Cole lives 2.4 miles from the library. Gwen lives2.04 miles from the library. Xander lives 2.40 milesfrom the library. Who lives closest to the library:Cole, Gwen, or Xander?
- **14.** After making his art project, Robbie has  $\frac{2}{10}$  yard of rope left. What is  $\frac{2}{10}$  written as a decimal?

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Brenner family hikes 2.8 miles. On the first day of a trip, the bike  $1\frac{2}{5}$  miles along a trail. They take a break, and hike back to where they started. Did they hike more the first day or the second day? Explain.



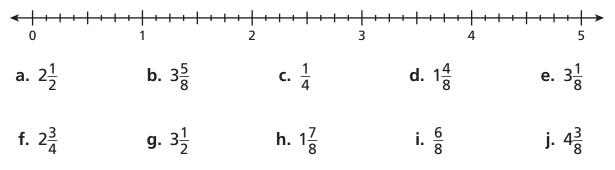
8-1	Name	 
Remem	bering	
Add or sub	tract.	

<b>1.</b> $5\frac{4}{5}$	<b>2.</b> $12\frac{5}{8}$	<b>3.</b> $3\frac{5}{7}$	<b>4.</b> $6\frac{2}{9}$
$+ 3\frac{1}{5}$	$-4\frac{3}{8}$	$+9\frac{3}{7}$	$-2\frac{5}{9}$

Write < or > to make each statement true.

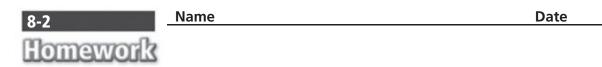
- 5.  $\frac{3}{4}$   $\bigcirc \frac{1}{4}$  6.  $\frac{5}{6}$   $\bigcirc \frac{5}{4}$  7.  $\frac{7}{10}$   $\bigcirc \frac{7}{12}$  

   8.  $\frac{6}{8}$   $\bigcirc \frac{4}{8}$  9.  $\frac{4}{8}$   $\bigcirc \frac{4}{12}$  10.  $\frac{17}{25}$   $\bigcirc \frac{21}{25}$
- 11. Mark and label the point for each fraction or mixed number with its letter.

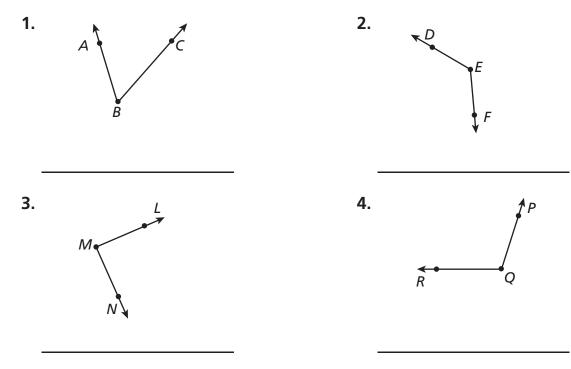


- 12. Stretch Your Thinking Two spiders sit on the upper left corner of a window frame. One spider starts walking right along the top of the window frame. The other spider starts walking down along the left side of the window frame. Name each of the following using geometry terms.
  - a.) the place where the spiders began \_\_\_\_\_
  - b.) the walking path of each spider \_\_\_\_\_\_
  - c.) the type of angle formed by their paths \_\_\_\_\_

Date



Use a protractor to find the measure of each angle.



Draw each angle.

**5.** an angle with measure  $75^{\circ}$ 



7. On a protractor there are two scales. Read one scale to find 44°. What is the measure on the other scale?

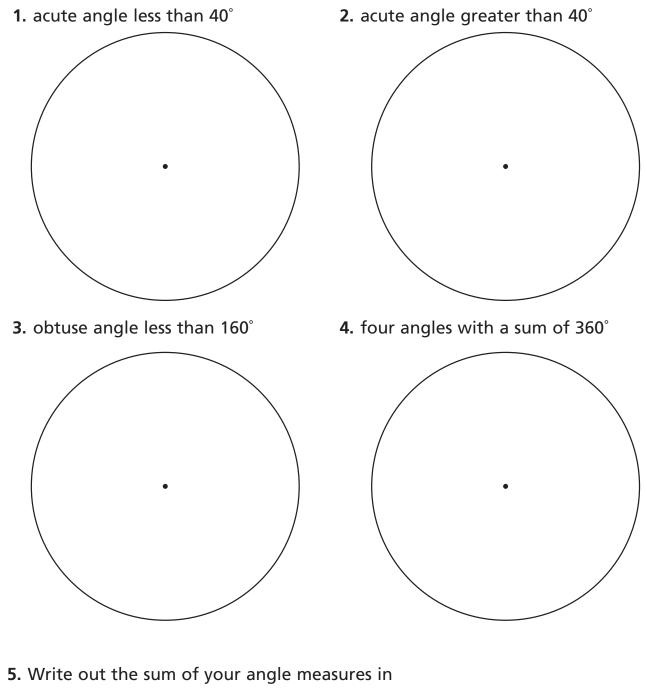
**8.** Which would be greater, the measure of a right angle or the measure of an obtuse angle?

8-2 Name		Date
Remembering		
Solve.		Show your work.
<ol> <li>Presley ordered a small pop medium popcorn. They bot Who ate more popcorn? Ex</li> </ol>	h ate $\frac{3}{4}$ of their popcorn.	
<b>2.</b> It takes both Jack and Scoth Jack had his headphones of had his on for $\frac{2}{5}$ of the wall on longer? Explain.	n for $\frac{2}{3}$ of the walk and S	Scott
Draw each geometric figure.3. a line segment4.	a line	5. an angle
<b>6.</b> Name the angle shown.	PQ	R R ®
<ul> <li>7. Stretch Your Thinking You of a clock as rays of an ang you see between the clock the following times? Draw</li> <li>a.) 3:05</li> <li>b.) 6:00</li> </ul>	le. What type of angle d hands when the clock sh a sketch, if you need to.	IO Publis

**c.**) 9:10 \_\_\_\_\_

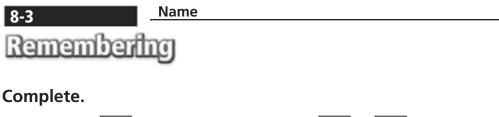


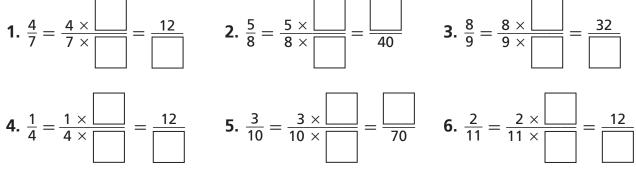
Use a straightedge and a protractor to draw and shade an angle of each type. Measure and label each angle.



Exercise 4 to show that the sum equals 360°.

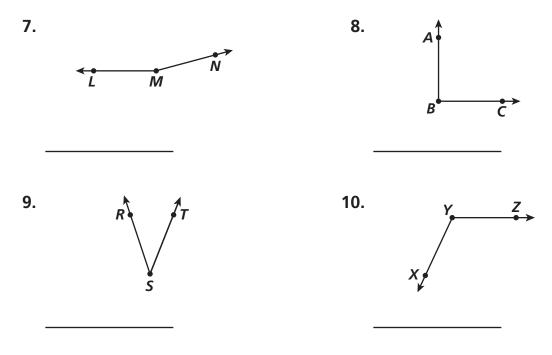
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Date

# Use a protractor to find the measure of each angle.

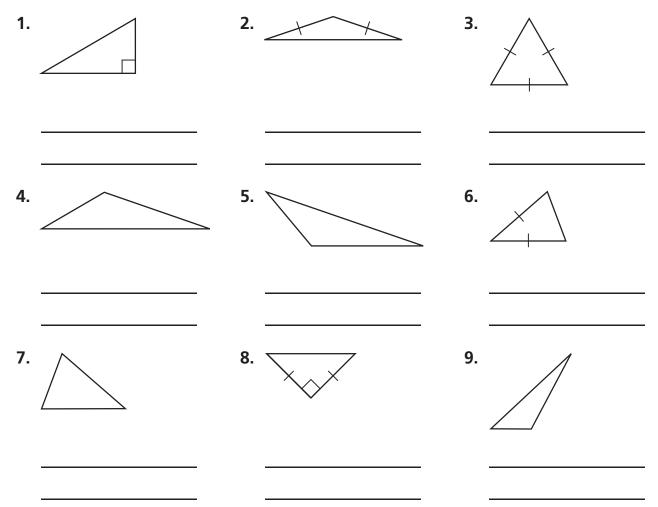


**11. Stretch Your Thinking** Draw an angle with a measure of 0°. Describe your drawing.



8-4

Name each triangle by its angles and then by its sides.



**10.** Describe how acute, obtuse, and right triangles are different.

**11.** Describe how scalene, isosceles, and equilateral triangles are different.

# Remembering

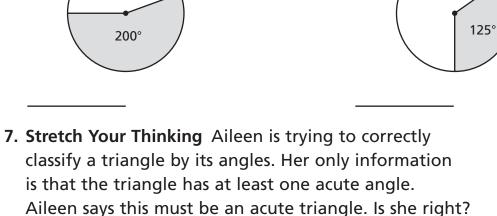
8-4

5.

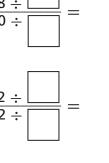
Simplify each fraction.



The measure of each shaded angle is given. Write the measure of each angle that is not shaded.

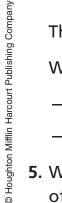


Aileen says this must be an acute triangle. Is she right? Explain.



6.





5. When two 45° angles are put together, what kind of angle will they form?

Date

Use a protractor to draw the two described angles next to each other. What is the measure of the larger angle they form when they are put together?

**1.** The measures of the two angles are 20° and 55°.

8-5

Homework

2. The measures of the two angles are 65° and 95°.

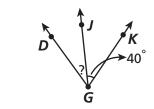
Write and solve an equation to find the unknown angle measure.

3.

The measure of  $\angle ABC$  is 115°.

90

What is the measure of  $\angle EBC$ ?



4.

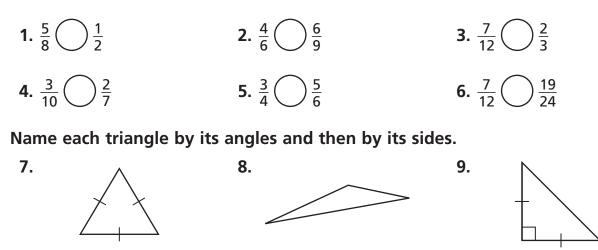
The measure of  $\angle DGK$  is 70°.

What is the measure of  $\angle DGJ$ ?





Use a common denominator to compare the fractions. Write >, <, or = to make a true statement.



**10. Stretch Your Thinking** Four angles are put together, forming a straight angle. Two of the angles are the same size. The other two angles are also the same size but different from the other two. If one of the four angles measures 40°, what are the measures of the other three angles? Explain.

# Homework

8-6

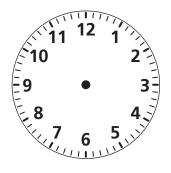
### Write an equation to solve each problem.

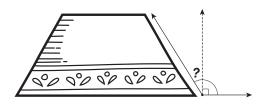
 Suppose you are bicycling along a straight road that suddenly starts sloping up a hill. You want to know what the angle measure of the slope is, but you can't measure inside the hill.

If you are able to measure the angle on top of the road, however, you can use an equation to find the unknown measure. What is the angle of the slope of the hill shown?

- 2. On the clock face shown at the right, draw clock hands to show the times 3:00 and 5:00. One clock hand for each time will overlap with a clock hand from the other time. What is the difference between the measures of the angles formed by the hands of the clocks for the two times? (Hint: There are 30° between each pair of numbers on a clock.)
- 3. A lampshade is often sloped, with the top narrower than the bottom. For the lampshade shown, the whole angle shown is 122°. Find the measure of the unknown angle to find by how much the lampshade is sloped from upright.







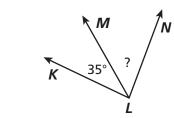
The line plot shows the amount of cream put in a cup by each of a restaurant's lunch customers who ordered hot tea. Use the line plot for Problems 1–3.

- 1. How many customers ordered hot tea?
- 2. How many customers used more than 1 tablespoon of cream?
- **3.** What is the difference between the greatest and least amount of cream the customers used?

Cream in Tea (in Tablespoons)

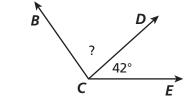
Use an equation to find the unknown angle measure.

5.



4.

The measure of  $\angle KLN$  is 85°.



The measure of  $\angle BCE$  is 125°.

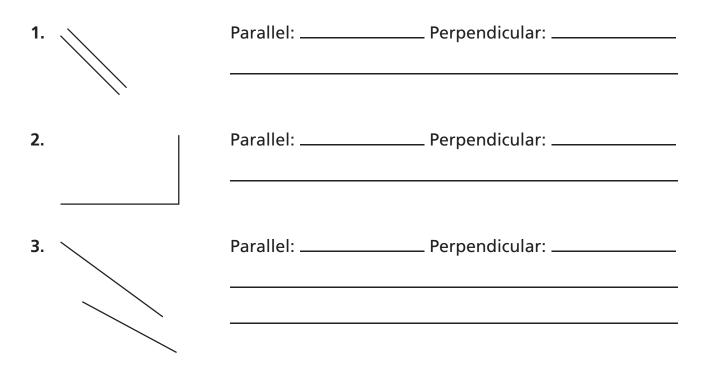
6. Stretch Your Thinking Hannah says that when the hands on a clock show 9:30, the angle is 90°. Jennie says the angle is obtuse. Who is correct? Explain. Make a drawing to show which girl is correct.



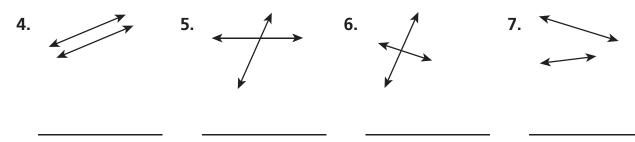
8-7

Homework

Which of the line segments below look parallel? Which look perpendicular? Which look neither parallel nor perpendicular? Explain your thinking.



Tell whether each pair of lines is parallel, perpendicular, or neither.



8. First draw a line segment 5 cm long. Then draw a line segment 7 cm long parallel to your first line segment.

#### Date

Use the visual to fill in each blank.

Remembering

8-7

**1.** The shaded part of the whole represents:

Name

 $\frac{30}{100}$  represents \_\_\_\_\_ of \_\_\_\_ equal parts

and the decimal \_\_\_\_\_.

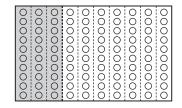
 $\frac{3}{10}$  represents \_\_\_\_\_ of \_\_\_\_ equal parts

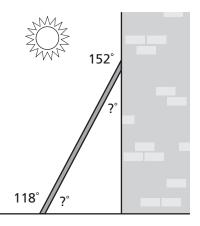
and the decimal \_\_\_\_\_.

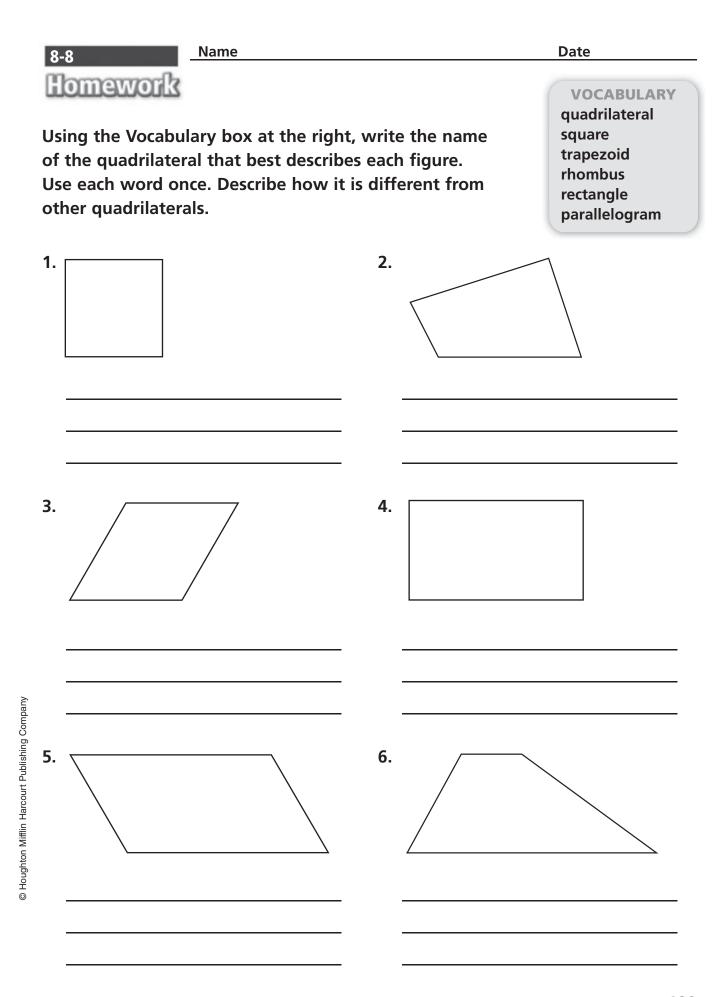
# Write an equation to solve each problem.

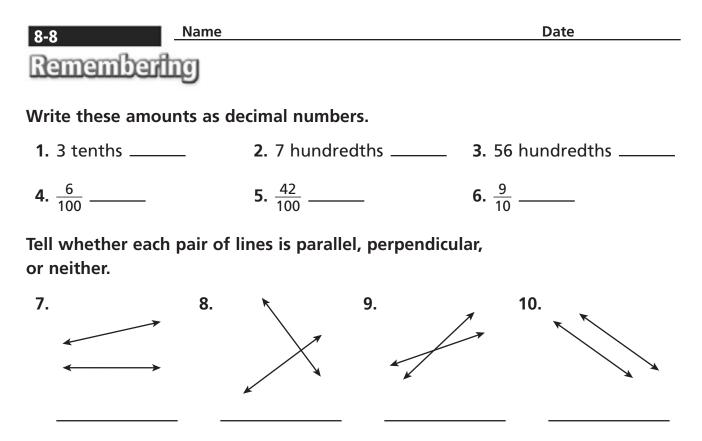
- 2. A ladder leans up against a wall, as shown in the diagram. What angle measure does the ladder form with the wall?
- **3.** What angle measure does the ladder form with the ground?
- Stretch Your Thinking Look around the room.
   Describe 3 pairs of parallel line segments you see.
   Describe 3 pairs of perpendicular line segments.

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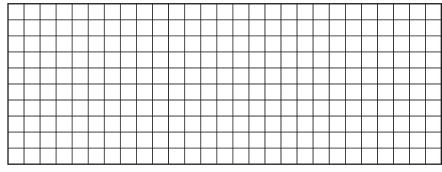




- First draw a line segment 4 cm long. Then draw a line segment 3 cm long that is not parallel nor perpendicular to the first line.
- **12. Stretch Your Thinking** Bianca has a certain shape in mind. She says it has all the following names: quadrilateral, parallelogram, and rectangle. Make a drawing that could be Bianca's shape. Explain why it has each of these names.



**1.** Draw a rectangle and a parallelogram. Draw one diagonal on each figure. Name the kinds of triangles you made.



**2.** Draw your figures again. Draw the other diagonal and name the kinds of triangles you made this time.

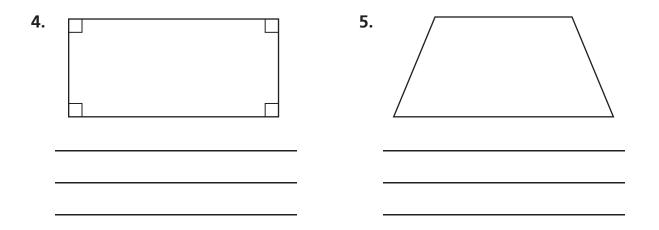
**3.** Use geometry words to describe how diagonals of quadrilaterals make triangles.

**4.** Use geometry words to describe a way to separate triangles into other triangles.

8-9 Remei	mberi	 Date			
Write the	decima	I numbers	that come r	next.	
<b>1.</b> 0.01	0.02	0.03			 
<b>2.</b> 0.3	0.4	0.5			 
<b>3.</b> 0.46	0.47	0.48			 

Using the Vocabulary box at the right, write the name of the quadrilateral that best describes each figure. Use each word once. Describe how it is different from other quadrilaterals.

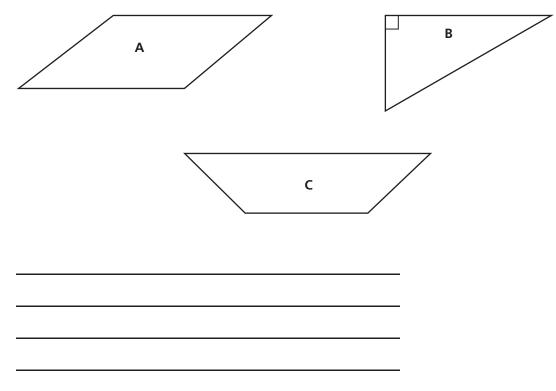
VOCABULARY trapezoid rectangle



6. Stretch Your Thinking Suppose you drew a diagonal in each of the following quadrilaterals: rectangle, trapezoid, parallelogram. In which figures do triangles with the same size and shape form? In which figures do triangles with a different size and shape form? Explain.

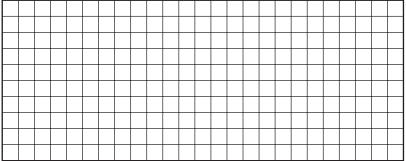


1. What are some different ways you could sort these three figures? Which figures would be in the group for each sorting rule?



2. Draw a fourth figure to add to the figures in Exercise 1. Does it match any of the sorting rules you listed for Exercise 1?

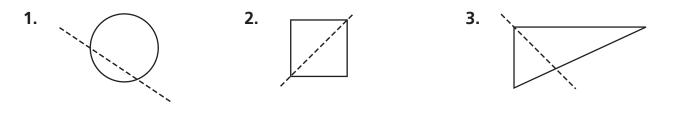
8-10 <u>Name</u>		Date						
Write each amount in decimal form.								
1. 8 tenths	<b>2.</b> 62 hundredths	3. 8 hundredths						
<b>4.</b> 3 <sup>4</sup> / <sub>10</sub>	<b>5.</b> 5 <sup>37</sup> / <sub>100</sub>	<b>6.</b> 73 <sup><u>1</u></sup>						
7. 12 and 3 tenths	8. 9 and 82 hundredths	9. 45 and 6 hundredths						
•	iombus. Draw one diagonal he kinds of triangles you m							
11. Draw your figures again. Draw the other diagonal								
and name the kinds of triangles you made this time.								



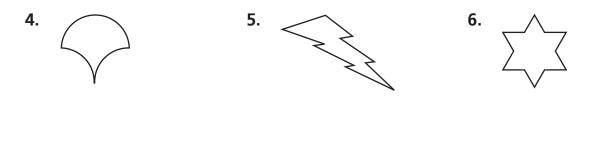
**12. Stretch Your Thinking** Draw and name three polygons that each have at least one right angle. Label each right angle on the polygons.



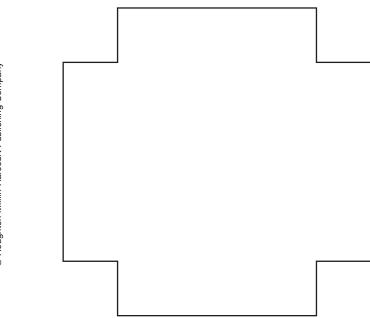
Tell whether the dotted line is a line of symmetry.



# How many lines of symmetry does each figure have?



7. Draw any lines of symmetry for this figure.



8-11 Name		Date
Remembering		
Add or subtract.		
<b>1.</b> 12,493 + 6,551	<b>2.</b> 536,784 - 69,205	<b>3.</b> 900,040 <u>- 318,276</u>
4. What are some differe three figures? Which f for each sorting rule?		e group
<b>5.</b> Draw a fourth figure t Does it match any of th Exercise 4?	-	

6. Stretch Your Thinking Consider only the shape and not the design of the following real life objects: square dinner plate, stop sign, American flag, letter P, letter M, tennis racket. Which of these objects have line symmetry? Which of these objects have more than one line of symmetry? Write the first letter of your first name. Does it have line symmetry?

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Draw a flag design. The design must include a quadrilateral with 2 lines of symmetry. The flag must also have a triangle with a 45° angle.

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- What type of quadrilateral did you draw? How did you make sure that the quadrilateral has 2 lines of symmetry?
- 2. What type of triangle did you draw in the flag design? What tool did you use to make sure that the angle you drew measures 45°?

