Vocabulary: In 1–3, match each with its example.

1. expanded form
   a. the length of time between 3:30 A.M. and 6:00 A.M.
   1. ________

2. digits
   b. 1,000 + 500 + 30 + 9
   2. ________

3. elapsed time
   c. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
   3. ________

In 4–7, write the value of the underlined digit.

4. 5,783
   4. ________

5. 40,719
   5. ________

6. 226,855
   6. ________

7. 6,119,088
   7. ________

8. Write the word name for 402,000.
   __________________________

9. Write fifty million, six hundred thirty-eight in standard form.
   __________________________

In 10–11, complete the table. Write how many ones, tens, and hundreds are in each number.

<table>
<thead>
<tr>
<th>Number</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>3,200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In 12–14, compare. Write <, >, or =.

12. 8,601 < 7,899
13. 33,812 = 33,182
14. 5,455 < 54,555

15. How many different two-color outfits can Jere make if she has red and blue skirts and yellow, green, and white sweaters? Make an organized list to show the outfits.
In 10–12, use the line plot.

10. How many students scored 90 points?

11. What is the most common score?

12. Two students scored 105. Add their scores to the line plot.

In 13–14, use the stem-and-leaf plot.

13. How many birthdays are on the 20th day?

14. How many birthdays are shown in the plot?

15. Find the range, median, and mode for the set of numbers. Use this set of numbers: 2 9 7 1 3 2 8

   Range _______ Median _______ Mode _______

16. Complete the table. Write the rule.

<table>
<thead>
<tr>
<th>In</th>
<th>18</th>
<th>16</th>
<th>14</th>
<th>12</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out</td>
<td>15</td>
<td>13</td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

17. Su earned $18 in two weeks. She earned $4 more this week than last week. How much did Su earn each week?

   Last week _______ This week _______

18. Explain Your Thinking On a bar graph showing students’ favorite sports, explain how you can tell the sport most often chosen.
In 16–17, order the numbers from least to greatest.

16. 36,551   63,155   36,515

17. 701,107   707,101   701,701

18. Round 5,601 to the nearest thousand.
19. Round 3,482 to the nearest thousand.

In 20–21, write each time two different ways.

20.  

21. [5:12]

22. Does a store close at 9:00 A.M. or 9:00 P.M.?

In 23–25, compare. Write >, <, or =.

23. 8 weeks ■ 3 months

24. 200 minutes ■ 2 hours

25. 18 months ■ 2 years

In 26–28, write each elapsed time.

26. 5:15 P.M. to 5:15 A.M.

27. 2:00 P.M. to 4:00 P.M.

28. 1:45 P.M. to 2:15 P.M.

29. Which month is the seventh month of the year?

30. How many months have 31 days?

31. Explain Your Thinking Write a 3-digit and a 4-digit number that round to the same number when rounded to the nearest hundred. Explain.
Vocabulary: In 1–3, match each word with its meaning.

1. difference  a. a way to estimate by first looking at the leading digits
2. estimate  b. number obtained by subtracting
3. front-end estimation  c. to find a number close to an exact amount

In 4, complete each number sentence.

4. $7 + 2 = 9$
   $70 + 20 = n$
   $700 + 200 = 900$
   $7,000 + 2,000 = n$

In 5–7, find each sum or difference. Use mental math.

5. $540 + 200$
6. $360 + 630$
7. $780 - 420$

In 8–10, estimate each sum or difference. Round to the nearest hundred.

8. $768 - 284$
9. $933 - 645$
10. $529 + 255$

11. Jay ran a 100-yard dash in 14 seconds. Is the time an exact amount or an estimate?

In 12–15, find each sum. Estimate to check.

12. $723 + 538$
13. $4,825\ 14. \ 7,567$
    $+ \ 9,872\ + \ 2,483$
    $\phantom{+} + \ 4,309\ + \ 1,235$
15. $6,987$

Continued 73
In 17–19, subtract. Add or estimate to check.

17. \[ 829 - 473 = 356 \]  
18. \[ 4071 - 2895 = 1176 \]  
19. \[ 6001 - 5878 = 123 \]

20. Leo earned $290 mowing lawns and $340 pulling weeds. He spent $125. How much did he have left?

In 21–23, find the sum or difference.

21. \[ 8620 - 4000 = 4620 \]  
22. \[ 1468 + 3929 = 5397 \]  
23. \[ 3200 + 4704 = 7904 \]

In 24–25, compare. Write <, >, or =.

24. $164 \bullet $16.40
25. $7.49 \bullet $14.49

In 26–28, add or subtract. Estimate to check.

26. \[ 24.65 + 35.98 = 60.63 \]  
27. \[ 30.69 + 29.77 = 60.46 \]  
28. \[ 57.00 - 29.88 = 27.12 \]

29. Ana gives the cashier $5.00 for three items costing $1.50 each. How much change will she receive?

In 30–31, find the value for each \( n \).

30. \( 18 + n = 40 \)
31. \( n + 400 = 700 \)

32. Tiger had $10. Then he saved $4 each week. How much money did he have after 5 weeks?

33. Explain Your Thinking Explain how Agatha could use mental math to find 700 – 196.
Name ________________________________

Date _______________ Score ____________

Vocabulary: In 1-3, match each with its meaning.
1. product a. data arranged in rows and columns
2. array b. multiplication answer
3. factor c. number being multiplied

In 4-5, use a multiplication fact to help you find each product.
4. 8 × 20
5. 9 × 70

In 6-7, use patterns to find each product.
6. 7 × 3 = ______ 7 × 30 = ______ 7 × 300 = ______
7. 5 × 6 = ______ 5 × 60 = ______ 5 × 600 = ______

In 8-10, estimate each product.
8. 4 × 91
9. 48 × 6
10. 3 × 76

11. Use the array to help you find the product.

17
× 4

In 12-14, find each product. Estimate to check.
12. 5 × 22
13. 67 × 3
14. 8 × 51

Chapter 5 Test Form A
In 15-20, multiply.

15. \[ \begin{array}{c} 417 \\ \times 9 \end{array} \hspace{1cm} 16. \begin{array}{c} 307 \\ \times 6 \end{array} \\
\hspace{1cm} 15. \hspace{1cm} 16. \\
17. \begin{array}{c} 8005 \\ \times 3 \end{array} \hspace{1cm} 18. \begin{array}{c} 8208 \\ \times 3 \end{array} \\
\hspace{1cm} 17. \hspace{1cm} 18. \\
19. \begin{array}{c} 3.75 \\ \times 5 \end{array} \hspace{1cm} 20. \begin{array}{c} 16.41 \\ \times 6 \end{array} \\
\hspace{1cm} 19. \hspace{1cm} 20. \\

In 21-22, use mental math to multiply.

21. \[ 5 \times 52 \]
22. \[ 65 \times 3 \]
23. Write \[ 4 \times 7 \times 5 \] in three different ways. Then solve.

24. Brenda and three friends went bowling. It cost each person \$1.25\) to rent shoes and \$1.75\) to play a game. They each bowled \(2\) games. How much did it cost the group altogether?

25. Alice needs \(48\) plates. Plates come in packs of \(8\). Complete the table to find how many packs she needs.

<table>
<thead>
<tr>
<th>Number of packs</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of plates</td>
<td>8</td>
<td>16</td>
<td>24</td>
</tr>
</tbody>
</table>

26. Explain Your Thinking. Explain how multiplying money amounts is like multiplying whole numbers.

\[ \]
Vocabulary: In 1–3, match each with its meaning.

1. factors    a. the number obtained after multiplying
             1. _______

2. multiple   b. numbers that are multiplied together to obtain a product
             2. _______

3. product    c. the product of a given whole number and any other whole number
             3. _______

In 4–7, use patterns to find each product.

4. $70 \times 8 = \underline{\hspace{2cm}}$
   $70 \times 80 = \underline{\hspace{2cm}}$
   $70 \times 800 = \underline{\hspace{2cm}}$
   $70 \times 8,000 = \underline{\hspace{2cm}}$

5. $50 \times 4 = \underline{\hspace{2cm}}$
   $50 \times 40 = \underline{\hspace{2cm}}$
   $50 \times 400 = \underline{\hspace{2cm}}$
   $50 \times 4,000 = \underline{\hspace{2cm}}$

6. $40 \times 7 = \underline{\hspace{2cm}}$
   $40 \times 70 = \underline{\hspace{2cm}}$
   $40 \times 700 = \underline{\hspace{2cm}}$
   $40 \times 7,000 = \underline{\hspace{2cm}}$

7. $90 \times 5 = \underline{\hspace{2cm}}$
   $90 \times 50 = \underline{\hspace{2cm}}$
   $90 \times 500 = \underline{\hspace{2cm}}$
   $90 \times 5,000 = \underline{\hspace{2cm}}$

In 8–14, estimate each product.

8. $84 \times 23$

9. $66 \times 56$

10. $29 \times 78$

11. $53 \times 67$

12. $246 \times 58$

13. $709 \times 88$

14. $395 \times 31$
In 15–24, find each product.

15. \[72 \times 30\]  
16. \[53 \times 80\]  
17. \[41 \times 28\]  
18. \[57 \times 43\]  
19. \[95 \times 32\]  
20. \[42 \times 39\]  
21. \[32 \times 1,247\]  
22. \[2,371 \times 16\]  
23. \[15 \times \$14.95\]  
24. \[12 \times \$24.08\]  

In 25, decide if you should overestimate or underestimate. Solve.

25. Marty plans to deposit \$4.50 into his bank account each week. Estimate to see if he will have saved \$50 to pay for a computer game at the end of 21 weeks.

In 26, draw a picture to help you solve each problem.

26. Larry is in a bike race. There are 12 bikes in each row. There are 4 rows in front of him and 8 rows behind him. How many racers are there in all?

27. Explain Your Thinking Describe the steps you would follow to find the product of 1,258 and 47.
Vocabulary: In 1–4, complete each sentence with one of the words listed.

1. A number is _________ by another number if there is no remainder.
2. Whole numbers that are divisible by 2 are _________.
3. Average is another word for _________.
4. The numbers 3, 17, and 45 are _________.

In 5–10, use patterns to find each quotient.

5. \(400 \div 8\)  
6. \(540 \div 9\)  
7. \(360 \div 4\)  

8. \(240 \div 3\)  
9. \(420 \div 6\)  
10. \(180 \div 9\)  

In 11–13, estimate each quotient.

11. \(351 \div 9\)  
12. \(430 \div 5\)  
13. \(294 \div 4\)  

In 14–25, divide.

14. \(6 \overline{37}\)  
15. \(9 \overline{49}\)  
14. _________  
15. _________  

16. \(23 \div 5\)  
17. \(59 \div 8\)  
16. _________  
17. _________  

18. \(3 \overline{37}\)  
19. \(87 \div 6\)  
18. _________  
19. _________
Vocabulary: In 1–2, match each with its meaning.

1. congruent
   a. a straight path that goes on forever in both directions
   1. ______

2. line
   b. having the same size and shape
   2. ______

In 3–4, name the solid that each object looks like.

3. ▶
   3. ______

4. ▶
   4. ______

In 5–6, write the name of each polygon.

5. ▶
   5. ______

6. ▶
   6. ______

In 7–8, the lengths of the sides of a triangle are given. Name each triangle as scalene, isosceles, or equilateral.

7. 4 cm, 7 cm, 4 cm
   7. ______

8. 5 cm, 8 cm, 3 cm
   8. ______

In 9–10, name each triangle as right, acute, or obtuse.

9. ▶
   9. ______

10. ▶
    10. ______

In 11–12, tell whether each picture shows a slide, flip, or turn.

11. ▶
    11. ______

12. ▶
    12. ______
Name ________________________________

20. $4\sqrt{536}$  
21. $739 \div 5$  
20. _____________

22. $3\sqrt{92}$  
23. $619 \div 6$  
22. _____________

24. $4\sqrt{5.12}$  
25. $6.09 \div 3$  
24. _____________

26. Toby made 320 ounces of soup. How many 9-ounce bowls can he fill?  
26. _____________

In 27–28, find the mean of each set of numbers.  

27. 7, 6, 9, 4, 7, 3  
27. _____________

28. 87, 76, 86, 88, 83  
28. _____________

In 29–30, test if each number is divisible by 2, 3, or 5. If it is, then give the quotient.  

29. 273  
30. 578  
29. _____________

31. Jerry had some apple slices. He ate 5 slices. He threw away 5 slices because they were bruised. He has 3 slices left. How many slices did Jerry start with?  
31. _____________

32. **Explain Your Thinking** How many cars are needed to carry 36 people if 5 people can ride in one car? Explain how you know.
Vocabulary: In 1–4, match each word with its meaning.

1. units of length  a. the top number of a fraction
2. simplest form  b. the bottom number of a fraction
3. numerator  c. when the numerator and denominator of a fraction have no common factors other than 1
4. denominator  d. inch, foot, yard

5. Write a fraction for the shaded part.

6. Write a fraction that compares the squares to the whole set.

In 7–8, write a fraction that shows about how full each container is.

7. \[ \frac{1}{2} \text{ or } \frac{3}{4} \]
8. \[ \frac{1}{4} \text{ or } \frac{2}{3} \]

9. Write \( \frac{5}{4} \) as a whole number or mixed number.

10. Write \( 2 \frac{3}{5} \) as an improper fraction.

In 11–12, write a fraction for each shaded part. Then write an equivalent fraction.

11. 

12. 

Continued 189
13. Is the figure congruent, similar, or neither?

14. Are the lines parallel, intersecting, or perpendicular?

15. In 15–16, write the name of each quadrilateral.

16.

16.

17. In 17–18, tell how many lines of symmetry each figure has.

18.

18.

19. Norman stands behind Dennis. Dennis stands behind Rudy. Norman stands in front of Brad. Who is first in the line?

20. In 20–21, a rectangle has length 5 cm and width 6 cm.

20. Find the perimeter of the rectangle.

21. Find the area of the rectangle.

22. A rectangular prism is 4 inches long, 3 inches wide, and 3 inches high. Find its volume.

23. Explain Your Thinking The perimeter of a square measures 40 centimeters. Explain how you can find the length of each side. Then give the length.
in 1–16, find each sum or difference. Simplify.

1. \( \frac{1}{5} + \frac{2}{5} \)

2. \( \frac{1}{8} + \frac{3}{8} \)

3. \( \frac{2}{3} - \frac{1}{3} \)

4. \( \frac{11}{12} - \frac{5}{12} \)

5. \( \frac{1}{6} + \frac{7}{12} \)

6. \( \frac{7}{10} - \frac{3}{10} \)

7. \( \frac{5}{8} - \frac{1}{4} \)

8. \( \frac{1}{15} + \frac{1}{3} \)

9. \( \frac{5}{7} - \frac{3}{7} \)

10. \( \frac{1}{9} + \frac{1}{3} \)

11. \( \frac{14}{15} - \frac{2}{3} \)

12. \( \frac{2}{3} + \frac{1}{6} \)

13. \( \frac{3}{4} - \frac{1}{2} \)

14. \( \frac{5}{6} - \frac{1}{3} \)

15. \( \frac{9}{10} - \frac{3}{5} \)

16. \( \frac{1}{8} + \frac{3}{4} \)

17. Find the value of \( n \) for \( n + \frac{2}{5} = \frac{4}{5} \).
In 13–14, multiply or divide to find equivalent fractions.
13. \( \frac{4}{8} \)
14. \( \frac{2}{3} \)

In 15–16, write each fraction in simplest form.
15. \( \frac{2}{8} \)
16. \( \frac{8}{10} \)

In 17–20, write <, >, or = in \( \bigcirc \).
17. \( \frac{2}{3} \bigcirc \frac{3}{4} \)
18. \( \frac{3}{5} \bigcirc \frac{1}{2} \)
19. 28 in. \( \bigcirc \) 1 yd
20. 3 ft \( \bigcirc \) 1 yd

21. Order from least to greatest: \( \frac{1}{2}, \frac{2}{5}, \frac{1}{5}, \frac{3}{10}, \frac{7}{10} \).
22. Find \( \frac{1}{5} \) of 25.

In 23–24, measure the screw to the nearest:
23. \( \frac{1}{2} \) in.
24. \( \frac{1}{4} \) in.

25. Mt. Everest is 29,028 feet tall. About how many miles tall is the mountain?

26. Suke owns 3 more CDs than Marisa. If Nova buys 8 more CDs, she will own as many CDs as Suke. Which girl owns more CDs now, Marisa or Nova?

27. **Explain Your Thinking** Is each part of this square \( \frac{1}{6} \) of the whole square? Explain.
In 18–19, write the operation you would use.
Then solve.

18. Paolo ate $\frac{1}{8}$ of a pizza and Chandra ate $\frac{1}{4}$. How much of the pizza did they eat in all?

19. Lashonda has $\frac{3}{2}$ yard of fabric. She uses $\frac{3}{8}$ yard to make dolls. How much fabric is left?

In 20–24, choose the better estimate.

20. A box of pens: 8 oz or 8 lb

21. A box of books: 16 oz or 16 lb

22. A car: 2 lb or 2 T

23. A kitchen sink filled with water: 10 pt or 10 gal

24. A soda bottle: 16 c or 16 fl oz

In 25–28, complete.

25. 2 qt = $\text{______}$ pt

26. 36 ft = $\text{______}$ yd

27. 2 T = $\text{______}$ lb

28. 2 lb = $\text{______}$ oz

29. How many granola bars could you get for $5? (Granola Bars table)

<table>
<thead>
<tr>
<th>Granola Bars</th>
<th>2</th>
<th>4</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$1</td>
<td>$3</td>
<td>$4</td>
</tr>
</tbody>
</table>

30. Find $n$. $n + 3 = 7$, $n =$

31. Explain Your Thinking: Explain why you multiply when you change a larger unit to a smaller unit.
Vocabulary: In 1–3, write what each word measures.

1. centimeter

2. liter

3. gram

4. Suppose you have $1.05 in dimes and nickels. You have the same number of dimes as nickels. How many of each do you have?

In 5–6, write the decimal for each.

5. \(\frac{8}{10}\)

6. Four and sixty-seven hundredths

In 7–8, write <, >, or = for each.

7. 0.98 \(\bigcirc\) 1.07

8. 0.87 \(\bigcirc\) 0.09

9. Order 0.32, 0.09, 1.04, 3.52, 0.7 from least to greatest.

In 10–12, round each decimal to the nearest whole number.

10. 3.78

11. 2.05

12. 6.50

In 13–14, write the decimal for each fraction.

13. \(\frac{4}{5}\)

14. \(\frac{9}{20}\)

In 15–16, estimate each sum or difference. Round to the nearest whole number.

15. 6.23 + 3.78

16. 27.86 − 13.05
17. Write the addition or subtraction sentence for the grid.

In 18–22, find each sum or difference.
18. 0.48 + 0.23
19. 4.73 + 1.26
20. 0.87 − 0.24
21. 9.63 − 5.37
22. 7.34 − 2.28

In 23–24, choose the better unit of measure for each object.
23. Length of an eraser: centimeter or meter
24. Length of highway: meter or kilometer

In 25–26, complete.
25. 400 cm = m
26. 3 m = cm

In 27–28, write <, >, or = for each.
27. 50 cm ? 5 m
28. 3 m ? 300 cm

In 29–30, choose the better estimate for each.
29. Nickel (a 5-cent coin): 5 g or 5 kg
30. Ice-cube tray: 380 mL or 380 L

31. A soup’s temperature was 10.3°C before it was heated. After being heated, its temperature was 84.7°C. What was the temperature change?

32. Explain Your Thinking Explain how to write a decimal in hundredths that is equal to 0.6.
Vocabulary: In 1–4, match each with its meaning.

1. unlikely  a. the chance that an event will happen
2. probability b. result of an action or event
3. impossible c. probably will not happen
4. outcome d. definitely will not happen

In 5–7, find each quotient. Use mental math.

5. \(180 \div 90\)
6. \(360 \div 60\)
7. \(210 \div 70\)

In 8–10, estimate each quotient.

8. \(225 \div 72\)
9. \(468 \div 93\)
10. \(197 \div 48\)

11. Complete: \(276 \div 90 \bullet 275 \div 90\). Use <, >, or =.

12. Complete: \(640 \div 8 \bullet 6,400 \div 80\). Use <, >, or =.

In 13–18, divide and check.

13. \(368 \div 40\)
14. \(429 \div 70\)
15. \(60 \div 492\)
16. \(132 \div 62\)
17. \(83 \div 507\)
18. \(94 \div 756\)
In 19–20, write whether the event is impossible, unlikely, equally likely as unlikely, likely, or certain.

19. The sun will rise tomorrow morning.

20. It will snow in Washington, D.C., during January.

In 21, write whether the game is fair or unfair. If it is unfair, explain why.

21. A box contains these letters: A, B, C, D, E, F. Kevin gets a point if he draws a vowel. Steve gets a point if he draws a consonant.

22. A counter has a 1 on one side and a 4 on the other side. Another counter has a 3 on one side and a 7 on the other side. List all possible outcomes of flipping both counters.

23. What is the probability of rolling an even number on a number cube labeled 1–6? Write your answer as a fraction.

24. In a survey of 25 students, 5 students say they prefer to play basketball rather than baseball. Based on this survey, how many students out of 100 would you expect to play basketball?

25. José has a model car, a model plane, a model tank, and a model boat. How many ways can he arrange them on a shelf?

26. Explain Your Thinking Without finding the exact answer, tell whether 548 ÷ 90 will be greater than or less than 6. Explain.