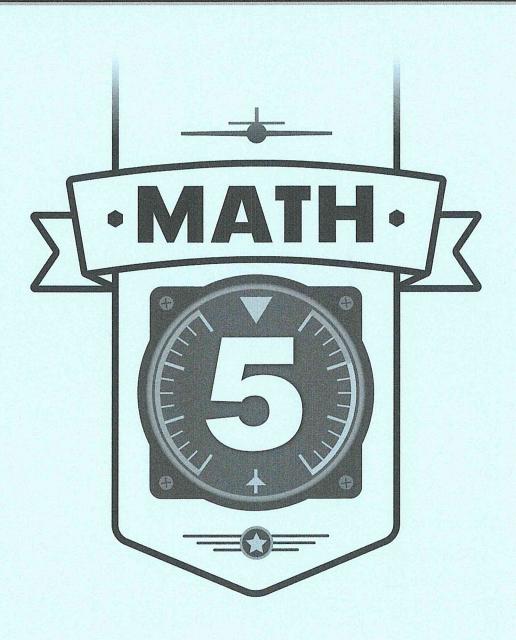
Assessments Answer Key for use with





Fourth Edition

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Chapter 1 Assessment

Write the value of 2 in the number.

- 1. 648,121,568,500 **20,000,000**
- 2. 2,000,541,714 **2,000,000,000**
- 3. 921,487 **20,000**

Circle the digit in the given place.

4.	Ten Millions place	294,326,704
5.	Hundred Thousands place	527,①39,048
6.	Ten Thousands place	87,639,211

Match.

- A 70,000,000 + 3,000,000 + 200,000 + 90,000 + 800 + 60 + 5
- B seventy-three million, twenty-nine thousand, eight hundred sixty-five
- C 73 millions, 294 thousands, 875 ones

D
$$(7 \times 10,000,000) + (3 \times 1,000,000) + (2 \times 100,000) + (9 \times 10,000) + (7 \times 1,000) + (8 \times 100) + (6 \times 10) + (5 \times 1)$$

Write the number in standard form.

11.
$$600,000,000 + 60,000,000 + 8,000,000 + 500,000 + 40,000 + 2,000 + 30 + 9 = ______668,542,039$$

12. five hundred eighty billion, three hundred one million, seventy-two thousand, three hundred ninety-four = 580,301,072,394

Write the number in expanded form.

14. six hundred twenty-one billion, three hundred twelve =

$$600,000,000,000 + 20,000,000,000 + 1,000,000,000 + 300 + 10 + 2$$

Round 718,270,536 to the given place.

Round 7.625 to the given place.

Write >, <, or = to compare.

23. 38,924 **3**,895

- **24.** 235,945,351 **233,485,152 25.** 8.52 **8**.6
- **26.** 776,501,200 **3** 776,511,100 **27.** 56,219,002 **36.** 56,219,002 **28.** 74 **4**
- **29.** $988,426 \bigcirc (9 \times 100,000) + (8 \times 10,000) + (9 \times 1,000) + (7 \times 100) + (2 \times 10) + (6 \times 1)$
- **30.** 361,270,455 (a) 300,000,000 + 60,000,000 + 1,000,000 + 200,000 + 70,000 + 400 + 50 + 5
- 31. 407,816,943 (a) four hundred seven million, eight thousand, nine hundred forty

Write the numbers from least to greatest.

32.	4,689	18,648	23,792	18,650
	4,689	18,648	18,650	23,792

33.	89,681	89,528	89,928	899,321
	89,528	89,681	89,928	899,321

	15,885	51,928	512,615	876,001
34.	512,615	876,001	51,928	15,885

35.	8.7			8
	7.9	8	8.2	8.7

36.	- 5	5	0	-3
	-5			5

Chapter 2 Assessment

Name_

Think of the applicable property or principle to complete the equation.

B
$$193 + 2,007$$

$$A$$
 3. 0 + 67.490 =

D
$$93 + (750 + 6,412)$$

D 5.
$$(93 + 750) + 6,412 =$$

$$E (6.2 + 3.9) + 4.0$$

Think of the applicable property or principle to find the missing number.

8.
$$21,034$$
 $-0 = 21,034$

Solve.

Round to estimate. Solve.

25.

Rule: + 51				
Input	Output			
15	66			
80	131			
134	185			
6,290	6,341			

26.

Rule: + 35				
Input	Output			
42	77			
75	110			
849	884			
3,170	3,205			

27.

Rule: – 19				
Input	Output			
69	50			
90	71			
480	461			
5,321	5,302			

Solve and label your answer.

28. Jeffrey saved \$57.00. He spent \$39.52 on birthday presents for his family. How much does he have left?

30. The university had 1,596 new students enroll. There are 9,275 returning students

will attend the university this year?

from the previous year. How many students

32. The zoo has 1,384 animals. If 463 of the animals are fish or birds, how many are not fish or birds?



29. Mom said Josiah could keep any money he found under the sofa cushions. He found the coins that are pictured. What amount of money did he find?

31. The fifth grade collected 42,967 pennies for the penny drive. The sixth grade collected 39,458 pennies. How many more pennies did the fifth grade collect than the sixth grade?

33. The stadium has 60,000 seats. If 49,365 seats are occupied, how many more people can be seated?

Chapter 3 Assessment

Name -

Identify the property shown.

_____ 1.
$$(12 \times 5) \times 30 = 12 \times (5 \times 30)$$

E 2.
$$35 \times 0 = 0$$

$$\bigcirc$$
 3. $14 \times 23 = 23 \times 14$

D 4.
$$89 \times 56 = (80 \times 56) + (9 \times 56)$$

B 5.
$$59 \times 1 = 59$$

Multiplication Properties

- A Associative Property
- **B** Identity Property
- **C** Commutative Property
- **D** Distributive Property
- **E** Zero Property

Write the factors of the number from least to greatest. Circle prime or composite to describe the number.

6.	36	1, 2, 3, 4, 6, 9, 12, 18, 36	prime	composite
7.	29	1, 29	prime	composite
8.	18	1, 2, 3, 6, 9, 18	prime	composite

Write the first 9 nonzero multiples of the number.

Use mental math to solve.

13.
$$20 \times 70 =$$
 1,400

14.
$$600 \times 50 = 30,000$$

14.
$$600 \times 50 =$$
 30,000 15. $4 \times 8,000 =$ **32,000**

Estimate the product.

$$7 \times 92 = n$$

21.
$$12 \times 35 = n$$

$$7 \times (90 + 2) = n$$

$$(7 \times \underline{90}) + (7 \times 2) = n$$

$$630 + 14 = n$$

$$644 = n$$

$$12 \times (30 + 5) = n$$

$$(12 \times \underline{30}) + (12 \times \underline{5}) = n$$

$$360 + 60 = n$$

$$420 = n$$

Solve.

$$\frac{\times 83}{201}$$

$$\frac{\times 46}{588}$$

$$\frac{\times 14}{1488}$$

Solve and label your answer.

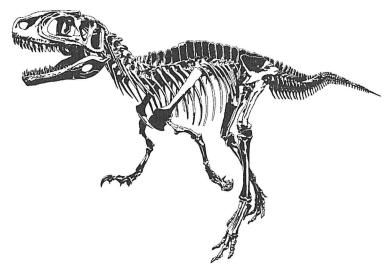
30. The 27 students in Mr. Andrews's class each paid \$9.75 for the field trip. Eight parents paid \$10 each to attend. How much money did Mr. Andrews collect?

31. The children's museum had 5,739 visitors this week. How many visitors might the museum expect over an 8-week period?

\$343.25

$$($9.75 \times 27) + ($10 \times 8) = $343.25$$

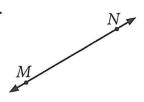
45,912 visitors $5,739 \times 8 = 45,912$ visitors



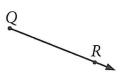
Chapter 4 Assessment

Identify the figure as an angle, line, line segment, or ray. Use a symbol to name the figure. Answers may vary.

1.



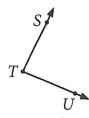
line MN or NM





line segment

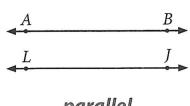
LM or ML



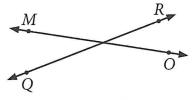
angle

Identify the pair of lines as intersecting, parallel, or perpendicular.

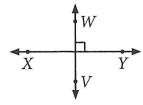
5.



parallel



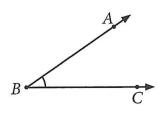
intersecting



perpendicular

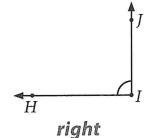
Classify the angle as right, acute, obtuse, or straight. Use a protractor to find the measure of the angle.

8.

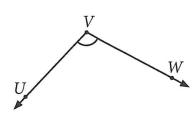


acute

∠ABC measures _



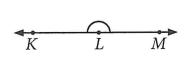
∠HIJ measures _90°



obtuse

∠*UVW* measures **105°**

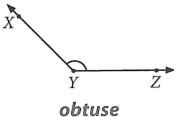
11.



straight

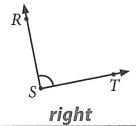
∠KLM measures 180°

12.



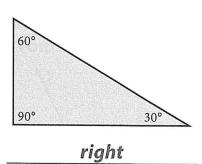
∠XYZ measures <u>135°</u>

13.

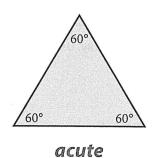


∠RST measures _

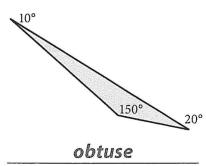
14.



15.

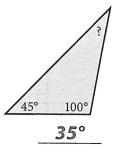


16.

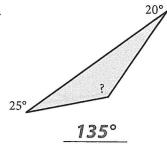


The sum of the measures of the three angles in a triangle equals 180°. Find the measure of the unknown angle.

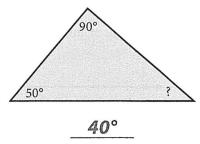
17.



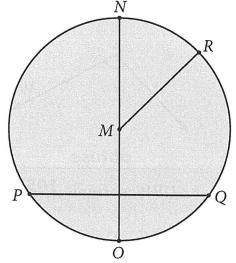
18.



19.



Identify the line segment as a chord, radius, or diameter.

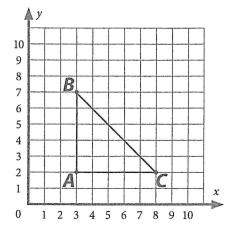


20. NO is a diameter

21. \overline{MR} is a <u>radius</u>

22. \overline{QP} is a _____ chord

Plot and label the points on the graph. Answer the question.



23. A (3, 2) B (3, 7) C (8, 2)

24. Connect the points.

What type of triangle is formed?

right

Chapter 5 Assessment

Write a division equation to find the missing factor. Solve for n.

1.
$$8 \times n = 56$$

$$n = 56 \div 8$$

$$n = 7$$

2.
$$7 \times n = 42$$

$$n = 42 \div 7$$

$$n = 6$$

3.
$$n \times 9 = 72$$

$$n = 72 \div 9$$

$$n = 8$$

Write the quotient.

4.
$$\frac{99}{11} = 9$$

5.
$$54 \div 6 = 9$$

6.
$$\frac{64}{8} = 8$$

Solve.

10.

	1	0	3	
9	9	2	7	
E11200	9			
	0	2	7	
FREEZE		2	7	
			0	

63 63

11.

		9	17	
8	7	9		
baccone	7	2		
		7		

12. $\frac{141}{7)989}$ r2

Use multiplication to check the quotient.

	1	4	1
X			7
	9	8	7
+			2
	9	8	9

Use mental math to solve.

16.
$$20 \times 50 = 1,000$$

14.
$$2,400 \div 6 = 400$$

17.
$$3 \times 700 = 2,100$$

Write a mathematical expression for the phrase.

- 6×20 19. the product of 6 and 20 ___
- **20**. the quotient of 549 and 9 **549 ÷ 9**
- 21. 16 times a number ______ **16 · n**

Mark the quotient.

- \bigcirc 400
- \bigcirc 213 **423** 231 \bigcirc 432
- 24. 5)105

25. 6)1,218

- \bigcirc 20
- **2**1 \bigcirc 25

 \bigcirc 200

203

 \bigcirc 23

Solve and label your answer.

26. The train on the roller coaster holds 24 riders. If each car holds 4 riders, how many cars are in the train?

$$24 \div 4 = 6 \text{ cars}$$

27. Twelve eggs equals one dozen. The cook scrambled 6 dozen eggs. How many eggs did he scramble?

$$6 \times 12 = 72 eggs$$

28. The game has a total of 316 plastic playing pieces divided evenly among 4 colors. How many playing pieces of each color are there?

 $316 \div 4 = 79$ pieces of each color

29. The market sells 2 pounds of red grapes for \$3.29 and 2 pounds of carrots for \$2.89. How much more do the grapes cost?

\$3.29 - \$2.89 = \$0.40 more

Mark the answer.

30. Each bumper car holds 2 riders. How many cars are needed for 23 people?

 \bigcirc 10

O 11

12

31. The Scoop Shoppe serves 43 flavors of ice cream. If you get a scoop of 3 different flavors each time you visit, how many trips will you have to make to try every flavor once?

 \bigcirc 13

 \bigcirc 14

15























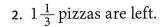


Chapter 6 Assessment

Name_

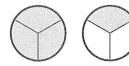
Draw a picture for the phrase. Pictures may vary.

1. $\frac{7}{8}$ of the wall is painted.



3. $\frac{1}{2}$ of a rectangle is equal to $\frac{3}{6}$ of a rectangle.







Complete the equivalent fraction.

4.
$$\frac{3}{4} = \frac{15}{20}$$

5.
$$\frac{5}{8} = \frac{25}{40}$$

6.
$$\frac{4}{9} = \frac{24}{54}$$

7.
$$\frac{25}{30} = \frac{5}{6}$$

8.
$$\frac{14}{50} = \frac{7}{25}$$

9.
$$\frac{16}{28} = \frac{4}{7}$$

Write >, <, or = to compare.

10.
$$\frac{4}{7}$$
 $\bigcirc \frac{2}{7}$

11.
$$\frac{9}{9} = 1$$

12.
$$2 \otimes \frac{7}{3}$$

13.
$$8\frac{2}{6} \otimes 8\frac{2}{3}$$

14.
$$\frac{14}{8} \bigcirc \frac{7}{4}$$

15.
$$3\frac{5}{6} \geqslant \frac{21}{6}$$

16.
$$\frac{21}{3} \bigotimes \frac{32}{8}$$

17.
$$\frac{1}{4} \bigotimes \frac{3}{8}$$

18.
$$4\frac{6}{8} \bigcirc 4\frac{3}{4}$$

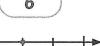
Plot the mixed number on the number line. Round to the nearest whole number.

19. $3\frac{1}{3}$



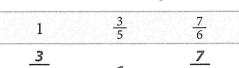
20.
$$7\frac{5}{6}$$
 8

21.
$$5\frac{2}{4}$$



Write the numbers from least to greatest.

22.



23.
$$3\frac{2}{3}$$
 $3\frac{5}{6}$ $3\frac{1}{9}$ $3\frac{7}{6}$ $3\frac{5}{6}$

Rename the mixed number to an improper fraction.

24.
$$1\frac{5}{8} = \frac{13}{8}$$

25.
$$4\frac{2}{3} = \frac{14}{3}$$

26.
$$7\frac{1}{2} = \frac{15}{2}$$

Rename the improper fraction to a mixed number.

27.
$$\frac{15}{4} = 3\frac{3}{4}$$

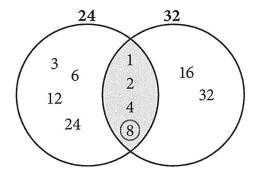
28.
$$\frac{29}{7} = 4\frac{1}{7}$$

29.
$$\frac{32}{5} = 6\frac{2}{5}$$

List the factors of the number. Mark the answer.

- 31. The number 13 is ?.
 - prime
- O composite
- 32. 18: **1, 2, 3, 6, 9, 18**
- 33. The number 18 is <u>?</u>.
 - O prime
- composite
- 34. 30: *1, 2, 3, 5, 6, 10, 15, 30*
- 35. The number 30 is ?.
 - O prime
- composite
- 36. The greatest common factor (GCF) of 18 and 30 is ____6__.

Use the Venn diagram to find the answer.



- 37. Shade the section of the diagram that shows the common factors of 24 and 32.
- 38. Circle the GCF (greatest common factor).

Rename the fraction in lowest terms.

39.
$$\frac{16}{24} = \frac{2}{3}$$

40.
$$\frac{12}{48} = \frac{1}{4}$$

41.
$$\frac{15}{25} = \frac{3}{5}$$

Complete the table.

1.

Rule	Rule: × 8	
Input	Output	
10	80	
30	240	
50	400	
100	800	

2.

Rule	:÷30
Input	Output
90	3
150	5
2,100	70
2,700	90

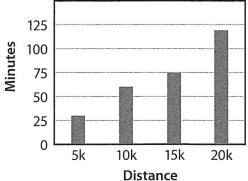
3.

Rule:	Rule: <u>+ 5</u>	
Input	Output	
5,000	1,000	
4,500	900	
4,000	800	
3,500	700	

Use the graph to find the answer.



Running Times



4. What was the total number of miles run this week?

> 0 10 mi

20 mi

30 mi

31 mi

5. On which day were fewer miles run than the day before?

Tuesday

Wednesday

Thursday

6. What time is recorded for the 10k run?

50 sec

50 min

60 min

75 min

7. The 20k run time is nearly ? times the 5k run time.

Mark the answer.

8.

50 donuts 12 donuts per box

4 boxes of donuts, 2 donuts left

O 4 boxes of donuts, 8 donuts left

O 6 boxes of donuts

10 bowling pins per alley 5 alleys

O 2 bowling pins total

O 15 bowling pins total

50 bowling pins total

Divide.

Use multiplication to check your answers for problems 12 and 17 above.

Mark the better estimate for the quotient.

$$\bigcirc$$
 5

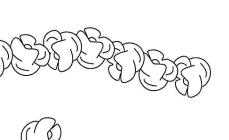
Solve and label your answer.

22. Leslie's chickens laid 4,360 eggs this year. How many egg cartons holding 12 eggs each was she able to fill completely?

$$4,360 \div 12 = 363$$
 cartons

23. Alfonzo strung 17 strands of 100 kernels of popcorn. He has 57 kernels of popcorn left. How many kernels did he begin with?

 $(17 \times 100) + 57 = 1,757$ kernels



Chapter 8 Assessment

Name.

Write the time. Complete the word form.

1.



10:15

quarter after 10

2.



17 minutes before 3

3.



28 minutes after 7

Write the elapsed time.

4. Gregory woke up at 5:23 a.m. He went to sleep at 10:35 p.m. How long did he sleep?

6 hr 48 min

Write the time with a.m. or p.m.

5. 2 hr 20 min before 1:15 p.m.

10:55 a.m.

Complete the facts.

7.
$$1 \text{ hr} = 60 \text{ min}$$

15. 1 century =
$$100$$
 years

16. 1 ft =
$$12$$
 in.

17.
$$1 \text{ yd} = 36 \text{ in.}$$

18.
$$1 \text{ yd} = 3 \text{ ft}$$

20.
$$1 \text{ mi} = 1,760 \text{ yd}$$

21.
$$1 \text{ lb} = 16 \text{ oz}$$

22.
$$1 \text{ tn} = \frac{2,000}{16} \text{ lb}$$

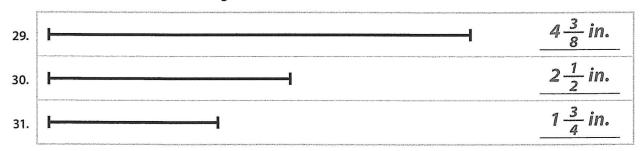
23.
$$1 c = 8 floz$$

25.
$$1 \text{ qt} = 2 \text{ pt}$$

Answer the question.

- October 27. Which is the tenth month?
- 28. Flag Day is celebrated the 14th day of June each year. What is this year's Flag Day date in number form?

6/14/2019 Year may vary. Write the measurement of the line segment.



Solve. Rename if necessary.

32. 21 ft 4 in.

$$+ 7$$
 ft 11 in.
 -28 ft 15 in. = 33. 6 yd 1 ft
 -4 yd 2 ft

Rename the units.

37.
$$64 \text{ oz} = 4$$
 lb

36.
$$27 \text{ ft} = 9 \text{ yd}$$
 37. $64 \text{ oz} = 4 \text{ lb}$ 38. $40 \text{ in.} = 3 \text{ ft} 4 \text{ in.}$

39.
$$60 \text{ in.} = \underline{5} \text{ ft}$$
 40. $8 \text{ pt} = \underline{16} \text{ c}$ 41. $187 \text{ min} = \underline{3} \text{ hr} \underline{7} \text{ min}$

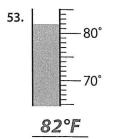
43.
$$7 \text{ tn} = 14,000 \text{ lb}$$

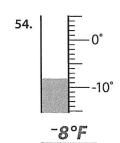
Write the unit of measure that best completes the statement. Use each abbreviation only once.

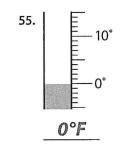
gal lb tn yd ft mi qt OZ

- **45.** A glass of lemonade holds 10 **OZ**.
- 47. A blue whale weighs 100 _tn_.
- 49. Jake ran 4 *mi* for the charity run.
- 51. A pitcher of milk holds 2 **9**t.
- 46. The aquarium holds 20 **gal** of water.
- 48. The longest blue whale measured 108 ______.
- 50. Jane bought 3 <u>yd</u> of material for a dress.
- 52. A bunch of bananas weighs 2 16.

Write the Fahrenheit temperature.







Chapter 9 Assessment

Name.

Solve. Simplify the answer.

1.
$$\frac{4}{9} + \frac{2}{9} = \frac{6}{9} = \frac{2}{3}$$

4.
$$\frac{1}{5} + \frac{3}{5} + \frac{1}{5} = \frac{5}{5} = 1$$

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

10.
$$7\frac{5}{9}$$

$$-3\frac{2}{9}$$

$$-4\frac{3}{9}=4\frac{1}{3}$$

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

5.
$$\frac{4}{8} + \frac{5}{8} + \frac{2}{8} = \frac{11}{8} = 1\frac{3}{8}$$

8.
$$\frac{5}{14} - \frac{3}{14} = \frac{2}{14} = \frac{1}{7}$$

11.
$$4 = 3\frac{6}{6}$$

$$-2\frac{2}{6} = 2\frac{2}{6}$$

$$1\frac{4}{6} = 1\frac{2}{3}$$

3.
$$\frac{8}{10} + \frac{3}{10} = \frac{11}{10} = 1\frac{1}{10}$$

4.
$$\frac{1}{5} + \frac{3}{5} + \frac{1}{5} = \frac{5}{5} = 1$$
5. $\frac{4}{8} + \frac{5}{8} + \frac{2}{8} = \frac{11}{8} = \frac{13}{8}$
6. $\frac{2}{4} + \frac{3}{4} + \frac{1}{4} = \frac{6}{4} = \frac{12}{2}$

9.
$$\frac{13}{16} - \frac{9}{16} = \frac{4}{16} = \frac{1}{4}$$
12. $5\frac{1}{16} = 4\frac{4}{16}$

12.
$$5\frac{1}{3} = 4\frac{4}{3}$$

 $-3\frac{2}{3} = 3\frac{2}{3}$
 $1\frac{2}{3}$

Complete the equivalent fraction.

13.
$$\frac{1}{2} = \frac{7}{14}$$

14.
$$\frac{3}{5} = \frac{9}{15}$$

15.
$$\frac{4}{7} = \frac{12}{21}$$

16.
$$\frac{7}{9} = \frac{28}{36}$$

17.
$$\frac{2}{3} = \frac{8}{12}$$

18.
$$\frac{1}{4} = \frac{2}{8}$$

Solve. Simplify the answer.

19.
$$\frac{\frac{1}{2} = \frac{2}{4}}{+ \frac{\frac{1}{4}}{3}} = \frac{1}{4}$$

20.
$$\frac{\frac{1}{2} = \frac{5}{10}}{\frac{3}{5} = \frac{6}{10}}$$
$$\frac{\frac{11}{10} = 1 \frac{1}{10}$$

21.
$$4\frac{2}{3} = 4\frac{4}{6}$$

 $+ 2\frac{5}{6} = 2\frac{5}{6}$
 $-6\frac{9}{6} = 7\frac{1}{6}$

23.
$$\frac{3}{4} = \frac{6}{8}$$
 $\frac{3}{8} = \frac{3}{8}$

24.
$$\frac{2}{4} = \frac{6}{12}$$
 $\frac{1}{6} = \frac{2}{12}$
 $\frac{4}{12} = \frac{1}{3}$

24.
$$\frac{2}{4} = \frac{6}{12}$$
 25. $\frac{3}{5} = \frac{9}{15}$ $-\frac{1}{6} = \frac{2}{12}$ $-\frac{1}{3} = \frac{5}{15}$ $\frac{4}{15}$

26.
$$3 = 2\frac{6}{6}$$

$$- 1\frac{5}{6} = 1\frac{5}{6}$$

$$1\frac{1}{6}$$

Estimate the answer. Solve. Simplify the answer.

27. Estimate
$$\begin{array}{c}
3\frac{1}{2} = 3\frac{3}{6} \\
4 \\
+3 \\
\hline
7
\end{array}$$

$$\begin{array}{c}
+2\frac{5}{6} = 2\frac{5}{6} \\
5\frac{8}{6} = 6\frac{1}{3}
\end{array}$$

Estimate
$$7\frac{1}{4} = 6\frac{10}{8}$$
 $-6\frac{7}{8} = 6\frac{7}{8}$ $\frac{3}{8}$

Estimate
$$5 = 4\frac{9}{9}$$

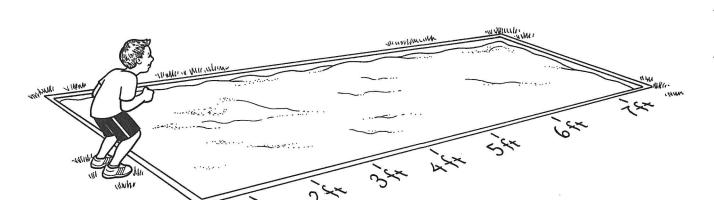
 $\frac{5}{-2}$ $\frac{1\frac{8}{9}}{3\frac{1}{9}} = 1\frac{8}{9}$

Jumper	Jump 1	Jump 2	Jump 3
Gavin	$3\frac{1}{3}$ ft	$3\frac{1}{2}$ ft	$3\frac{1}{6}$ ft
Drayton	$4\frac{3}{4}$ ft	$4\frac{1}{4}$ ft	$5\frac{1}{8}$ ft
Carter	$2\frac{7}{8}$ ft	$3\frac{1}{2}$ ft	$3\frac{1}{3}$ ft

Use the table to find the answer.

- 30. Who had the longest jump?
 - O Gavin
- Drayton
- O Carter
- 31. Which of Gavin's jumps was the shortest?
 - O jump 1
- O jump 2
- jump 3

- 32. Drayton's jumps totaled a distance of ?.
- $\bigcirc 13\frac{1}{2} \text{ ft}$ $\bigcirc 14\frac{1}{8} \text{ ft}$ $\bigcirc 14\frac{1}{2} \text{ ft}$
- 33. The difference between the shortest and the longest jumps was ?.
- \bigcirc $2\frac{1}{4}$ ft \bigcirc $2\frac{1}{2}$ ft \bigcirc $2\frac{3}{4}$ ft



Chapter 10 Assessment

Name _____

Use the given operations to write mathematical expressions for the value. Answers will vary.

•	24
ne entre pallace franchis	+
Parkettermannen propriet	
and secretaring and secretaring	×
Phenimatica	

45	
+	_
	 a
×	_
÷	_

50	
+	_
	_
×	-,
÷	

Match the phrase to the mathematical expression.

- **D** 4. Three equal stacks of paper sat on the counter.
- **B** 5. The checker pieces were sorted by color: red or black.
- ______ 6. The time on the clock was turned back one hour.
- 7. The band had three trumpets in the second row and some more trumpets in the third row.
- $\mathsf{A} \quad t-1$
- **B** *p* ÷ 2
- **C** 3 + t
- **D** 3 p

Write >, <, or = to make the statement true.

8.
$$6 \times 25 \bigcirc (6 \times 20) + (6 \times 5)$$

10.
$$15 \div 3 \bigcirc \frac{21}{7}$$

12.
$$71 + 0.8 > 70 + 0.18$$

14.
$$0.5 = \frac{1}{2}$$

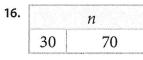
9.
$$a \cdot b = b \cdot a$$

11.
$$5 \times (7 \times 30) \bigoplus (5 \times 7) \times 30$$

13.
$$618 \div 0 \bigcirc 1 \times 618$$

15.
$$(x + y) + z \implies x + (y + z)$$

Write the value of *n* for the part-part-whole model.



$$n = 100$$

Solve.

20.





- 3 balls weigh 9 pounds.
- 1 ball weighs ____ 3 pounds







- 1 block weighs 12 ounces.
- 3 blocks weigh ____ **36 ounces**

Write the value of the expression if n = 3.

22.
$$n + 10$$

23.
$$27 \div n$$

$$3 + 10 = 13$$

$$27 \div 3 = 9$$

24.
$$(n-1)+2$$

$$(3-1)+2=4$$

24.
$$(n-1)+2$$
 25. $(7 \times 12)+n$

$$(3-1)+2=4$$
 $(7\times12)+3=87$

Write the value of n.

26.
$$50 \times n = 500$$

$$n = 10$$

27.
$$25 + n = 75$$

$$n = _{-}50_{-}$$

28.
$$200 - 10 = r$$

$$n = 190$$

29.
$$\frac{32}{n} = 8$$

27.
$$25 + n = 75$$
 28. $200 - 10 = n$ 29. $\frac{32}{n} = 8$ $n = 190$ $n = 4$

Draw a picture to solve. Label your answer. **Equations may vary.**

30. Delmas played 20 minutes of the soccer game. Donan played the entire $1\frac{1}{2}$ hours of the game. How much longer did Donan play than Delmas?

$$90 - 20 = 70 \, \text{min or 1 hr 10 min}$$

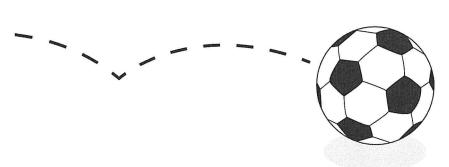
31. Donan dribbled the soccer ball from his team's goal line straight down the field for 85 yards. If there was then 45 feet between Donan and the opponent's goal line, how long is the soccer field?

$$85 \text{ yd} + 15 \text{ yd} = 100 \text{ yd or } 255 \text{ ft} + 45 \text{ ft} = 300 \text{ ft}$$

32. The cheering fans sat on 6 bleachers that held 50 people each. If there were 7 empty seats, how many fans were in the bleachers?

$$(6 \times 50) - 7 = 293$$
 fans





Chapter 11 Assessment

Name -

Identify the quadrilateral as a square, rectangle, trapezoid, rhombus, or parallelogram. Use each answer once.



rectangle



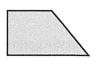
parallelogram



square



rhombus



trapezoid

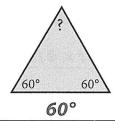
Match the shape to its number of sides.

- **D** 6. heptagon
- **C** 7. hexagon
- E 8. octagon
- **B** 9. pentagon
- A 10. quadrilateral

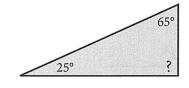
- A 4 sides
- B 5 sides
- C 6 sides
- D 7 sides
- E 8 sides

The angles of a triangle total 180°. Find the measurement of the unknown angle. Classify the triangle as acute, obtuse, or right.

11.



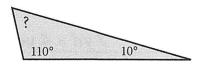
acute



90°

right

13.

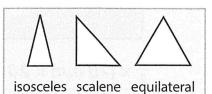


60°

obtuse

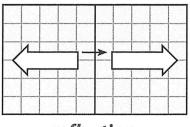
Identify the triangle.

- 14. The lengths of the sides are all the same. **equilateral**
- scalene 15. The lengths of the sides are all different. _
- isosceles 16. The lengths of at least 2 sides are the same. _

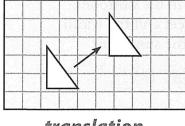


Write translation, rotation, or reflection to show how the figure moved.

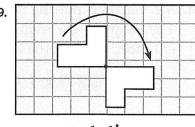
17.



reflection



translation



rotation







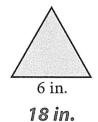


23.

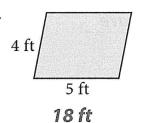


Find the perimeter.

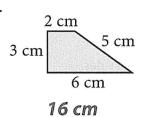
24.



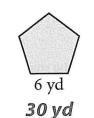
25.



26.

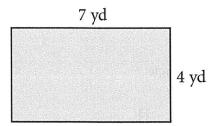


27.



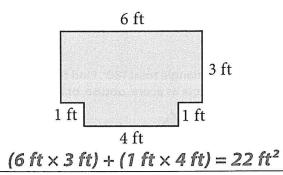
Find the area.

28.



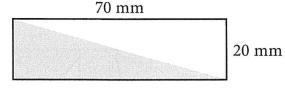
 $7 yd \times 4 yd = 28 yd^2$

29.



Find the area of the shaded part.

30.



 $\frac{1}{2}$ × (70 mm × 20 mm) = 700 mm²

Solve and label your answer.

31. Mr. Garcia is putting new tile in his sunroom. The length of the room is 22 feet and the width is 15 feet. What is the area of the sunroom?

$$22 \text{ ft} \times 15 \text{ ft} = 330 \text{ ft}^2$$

Chapter 12 Assessment

Solve. Write an addition equation to check the answer. Simplify the answer.

1.
$$5 \times \frac{3}{4} = \frac{3}{4} + \frac{3}{4} + \frac{3}{4} + \frac{3}{4} + \frac{2}{5} = \frac{4}{5} + \frac{4}{5} + \frac{4}{5} = \frac{3}{4} + \frac{3}{4} = \frac{15}{4} = 3\frac{3}{4}$$
2. $3 \times \frac{4}{5} = \frac{4}{5} + \frac{4}{5} + \frac{4}{5} = \frac{2}{5} = 2\frac{2}{5}$

2.
$$3 \times \frac{4}{5} = \frac{4}{5} + \frac{4}{5} + \frac{4}{5} = \frac{12}{5} = 2\frac{2}{5}$$

3.
$$4 \times \frac{1}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{1}{4} = 1$$

Solve. Simplify the answer.

4.
$$3 \times \frac{2}{8} = \frac{6}{8} = \frac{3}{4}$$

5.
$$6 \times \frac{1}{3} = \frac{6}{3} = 2$$

6.
$$1\frac{3}{4} \times \frac{1}{2} = \frac{7}{4} \times \frac{1}{2} = \frac{7}{8}$$

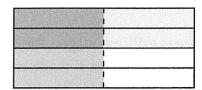
7.
$$2 \times 1\frac{1}{3} = 2 \times \frac{4}{3} = \frac{8}{3} = 2\frac{2}{3}$$

8.
$$\frac{3}{8} \times 12 = \frac{36}{8} = 4\frac{4}{8} = 4\frac{1}{2}$$
 9. $\frac{4}{5} \times 7 = \frac{28}{5} = 5\frac{3}{5}$

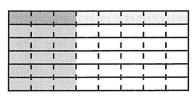
9.
$$\frac{4}{5} \times 7 = \frac{28}{5} = 5\frac{3}{5}$$

Shade the picture to help you solve. Simplify the answer.

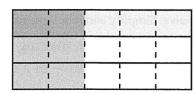
10.
$$\frac{1}{2} \times \frac{2}{4} = \frac{2}{8} = \frac{1}{4}$$



11.
$$\frac{3}{8} \times \frac{1}{6} = \frac{3}{48} = \frac{1}{16}$$



12.
$$\frac{2}{5} \times \frac{1}{3} = \frac{2}{15}$$



Solve. Simplify and label the answer. Equations may vary.

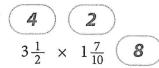
13. Ethan wanted to give each of his 5 friends a piece of bubblegum tape. Each piece was $\frac{1}{4}$ of a yard long. How many total yards of bubblegum tape did he plan to give away?

$$5 \times \frac{1}{4} = \frac{5}{4} = 1 \frac{1}{4} yd$$

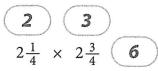
14. Ellen had 24 pictures. She gave her friend $\frac{2}{3}$ of them. How many pictures did she give away?

$$\frac{2}{3} \times 24 = \frac{48}{3} = 16 \text{ pictures}$$

Round each factor to the nearest whole number. Estimate the product.



$$1\frac{2}{6} \times 6\frac{1}{4}$$
 6



$$3\frac{5}{10} \times 4\frac{1}{2}$$
 20

Draw a picture to solve. Write the answer in lowest terms. Pictures may vary.

21.
$$2 \div \frac{1}{2} = 4$$



22.
$$1 \div \frac{1}{5} = 5$$



23.
$$3 \div \frac{1}{4} = 12$$



Solve. Simplify and label the answer. Equations may vary.

24. Mrs. Higgs is making pies for a church social. It takes $\frac{3}{4}$ of a cup of sugar for one pie. How many cups of sugar will she need for 7 pies?

$$7 \times \frac{3}{4} = \frac{21}{4} = 5\frac{1}{4}c$$

25. Mr. Brondyke is grilling burgers for the family picnic. Each burger is made with $\frac{1}{3}$ pound of ground beef. He has 12 pounds of ground beef. How many burgers can he make?

$$12 \div \frac{1}{3} = 36 \text{ burgers}$$

Chapter 13 Assessment

Name_

Write the fraction in decimal form.

1.
$$\frac{3}{10} =$$

2.
$$\frac{41}{100} = 0.41$$

2.
$$\frac{41}{100} = 0.41$$
 3. $\frac{278}{1,000} = 0.278$ 4. $\frac{5}{100} = 0.05$

4.
$$\frac{5}{100} =$$
0.05

Write the decimal in fraction form.

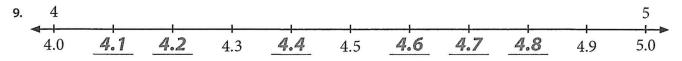
5.
$$0.06 = \frac{6}{100}$$

6.
$$0.24 = \frac{24}{100}$$

7.
$$0.70 = \frac{70}{100}$$

6.
$$0.24 = \frac{24}{100}$$
 7. $0.70 = \frac{70}{100}$ 8. $0.931 = \frac{931}{1,000}$

Write the missing decimals on the number line.



Write the decimals from least to greatest.

Round the decimal to the given place.

		Ones	Tenths	Hundredths
12.	6.572	7	6.6	6.57
13.	24.160	24	24.2	24.16
14.	9.728	10	9.7	9.73
15.	0.536	1	0.5	0.54

Write >, <, or = to compare.

Round to the nearest whole number to estimate the product. Solve.

4.68 × 5.8

3744 +23400 27.144

0.99 × 3.5

+2970

26.

5.248

$$\frac{\times}{36.736}$$

27.

35

31.188

Solve.

5)10.340 -**10**

Write the division problem. Solve to find the equivalent decimal for the fraction.

32.
$$\frac{1}{4} = 0.25$$

34.
$$\frac{3}{4} = 0.75$$

Solve and label your answer.

35. Miss White had 24.8 pounds of candy for her class. If the candy lasted for 8 weeks, about how many pounds did she use each week?

$$24.8 \div 8 = 3.1 \text{ lb}$$

Chapter 14 Assessment

Name.

Name the figure using a term from the word bank.

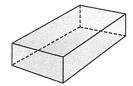
cylinder

rectangular prism sphere

square pyramid

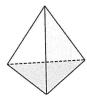
triangular pyramid

1.



rectangular prism

2.



triangular pyramid

3.



cylinder

4.



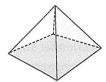
sphere

5.



cone

6.



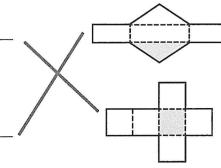
square pyramid

Identify the figure as a prism or a pyramid. Draw a line to match the figure to its net.

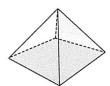
7.



prism

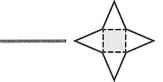


9.



pyramid

prism



Solve and label your answer.

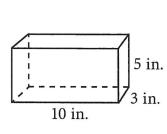
10. The Wetzel family is installing an aboveground pool in their backyard. The pool measures 5 yards by 3 yards. How many square yards of ground will the pool cover?

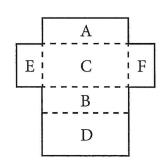
 $5 \text{ yd} \times 3 \text{ yd} = 15 \text{ yd}^2$

11. The Wetzels will also install a fence around the pool. What is the least amount of fencing needed?

5 yd + 3 yd + 5 yd + 3 yd = 16 yd

Find the surface area of the prism.





12.
$$A = 10$$
 in. $\times 3$ in. $= 30$ in.² $B = 10$ in. $\times 3$ in. $= 30$ in.²

$$C = 10$$
 in. $\times 5$ in. $= 50$ in.²
 $D = 10$ in. $\times 5$ in. $= 50$ in.²

$$E = 3$$
 in. $\times 5$ in. $= 15$ in.²
 $F = 3$ in. $\times 5$ in. $= 15$ in.²

total surface area =
$$190$$
 in.²

Find the perimeter and area of the figure.

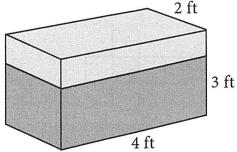
$$P = \frac{14 \text{ yd}}{10 \text{ yd}^2}$$

$$P = 12 \text{ cm}$$

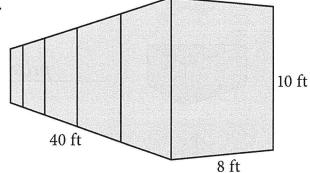
$$A = 9 cm^2$$

Write an equation to find the volume.

15.



16.



How much cubic space is in the shoebox?

 $V = \underline{\hspace{1cm}} 4 \text{ ft} \times 3 \text{ ft} \times 2 \text{ ft} = 24 \text{ ft}^3$

How many cubic feet of space are in the storage pod?

$$V =$$
 40 ft × 8 ft × 10 ft = 3,200 ft³

Chapter 15 Assessment

Name -

Write the unit used to measure the length: km, m, cm, or mm.

- 1. ____ width of a cell phone
- 3. ____ length of a driveway

- 2. km distance from Rome to Paris
- 4. _mm thickness of a stick of gum

Write the unit used to measure the capacity: L or mL.

Write the unit used to measure the mass: kg, g, or mg.

Mark the best estimate.

10.	distance to church	4 km	O 4 m	O 400 cm
11.	a cracker	O 4 kg	4 g	O 4 mg
12.	length of a book	○ 30 mm	○ 300 m	3 0 cm
13.	a housecat	7 kg	○7 mg	○7 g
14.	a bottle of cola	○ 10 mL	1 L	○ 100 mL
15.	a snowflake	O 1 kg	O 10 g	1 mg
16.	water in a child's pool	○ 15 mL	○ 150 mL	● 150 L
17.	paint for a room	3 L	○ 30 mL	○ 30 L

Rename the units.

18.
$$100 \text{ cm} = 100 \text{ m}$$

19.
$$8 L = 8,000 \text{ mL}$$

20.
$$4,000 \text{ g} = 4 \text{ kg}$$

21.
$$16 \text{ cm} = 160 \text{ mm}$$

22.
$$5 \text{ kg} = 5,000 \text{ g}$$

23.
$$3,000 \text{ mL} = 3$$

Mark the answer.

24.

$$720 \text{ cm} = \frac{?}{m} \text{ m}$$
 7.2
 0.072
 700.20

 25.
 $2.685 \text{ kg} = \frac{?}{g} \text{ g}$
 0.0268
 2,685

 26.
 $3,754 \text{ m} = \frac{?}{m} \text{ km}$
 0.3754
 0.3754

 27.
 $82 \text{ mm} = \frac{?}{m} \text{ cm}$
 0.8,200
 8.2
 0.082

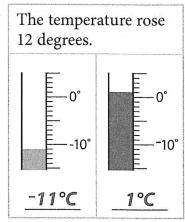
Write >, <, or = to compare.

- 28. 7.154 L \geqslant 7,000 mL
- 29. 30 cm \bigcirc 30 mm
- **30**. 2,000 m **3** 200 km

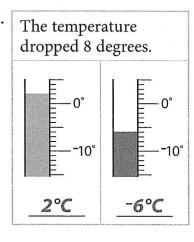
- 31. 6,000 mg (600 g
- **32.** 2,467 g (=) 2.467 kg
- 33. 30 cm \bigotimes 80 mm

Write the Celsius temperature. Write the new temperature. Shade the second thermometer to show the new temperature.

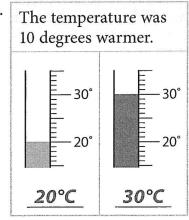




35.



36.



Solve. Rename if necessary.

37.
$$8 \text{ kg } 243 \text{ g}$$

 $+ 2 \text{ kg } 981 \text{ g}$
10 kg 1,224 g =
11 kg 224 g

Solve and label your answer.

40. Gabriella was 133 centimeters tall at the beginning of the school year. She ended the school year at 141 centimeters tall. How many centimeters did she grow?

$$141 \text{ cm} - 133 \text{ cm} = 8 \text{ cm}$$

41. Bryan needs to recarpet his bedroom.

The room is 5 meters long and 4 meters wide. How much carpet is needed?

$$5 m \times 4 m = 20 m^2$$

Chapter 16 Assessment

Name _____

Write the ratio in three forms.

- 1. Two out of 5 students are girls. 2 to 5 2:5 5
- 2. Three out of 14 families live on a farm. 3 to 14 3:14 14

Complete the unit rate.

Find the distance traveled in the given time.

6. 2.5 hr at 60 mi/hr =
$$150$$
 mi

Complete the proportion.

$$\frac{7.}{60} = \frac{15}{5}$$

8.
$$\frac{4}{8} = \frac{24}{48}$$

9.
$$\frac{5}{12} = \frac{25}{60}$$

10.
$$\frac{64}{56} = \frac{8}{7}$$

Solve and label your answer. **Equations may vary.**

11. Forrest was paid \$32 for working 4 hours. What was his rate of pay per hour?

12. Fruit costs \$1.19 per can. How much will 5 cans of fruit cost?

$$5 \times $1.19 = $5.95$$

13. The bus traveled 140 miles in 3 hours. At this rate how many miles will the bus travel in 6 hours?

14. Sandi can type 98 words in 2 minutes. What is her typing rate per minute?

$$\frac{98}{2}$$
 = 49 words/min

Write the ratio as a percent.

16.
$$\frac{3}{10} = 30\%$$

17.
$$\frac{82}{100} = 82\%$$

15.
$$6:100 = 6\%$$
 16. $\frac{3}{10} = 30\%$ 17. $\frac{82}{100} = 82\%$ 18. 17 to $100 = 17\%$

Write the percent as a fraction in lowest terms.

19.
$$40\% = \frac{2}{5}$$

20.
$$70\% = \frac{7}{10}$$

21.
$$25\% = \frac{1}{4}$$

22.
$$20\% = \frac{1}{5}$$

Write the percent in decimal form. Write the decimal in percent form.

23.
$$35\% = 0.35$$
 24. $18\% = 0.18$ 25. $0.99 = 99\%$ 26. $0.04 = 4\%$

Find the percent of the number.

28.
$$30\%$$
 of $40 = 12$

29.
$$10\%$$
 of $70 =$

27.
$$10\%$$
 of $40 = 4$ 28. 30% of $40 = 12$ 29. 10% of $70 = 7$ 30. 40% of $70 = 28$

Solve and label your answer. Equations may vary.

31. On Friday, 6 of Mrs. McCauley's 25 students purchased hot lunches. What percent of her class purchased a hot lunch?

$$\frac{6}{25} = \frac{24}{100}$$
; 24%

32. During volleyball season, the Mustangs lost 4 of the 20 games they played. What percent of their games did the Mustangs lose?

$$\frac{4}{20} = \frac{20}{100}$$
; 20%

33. A pair of shoes that are regularly priced at \$60 are on sale for 20% off. What is the sale price for the pair of shoes?

$$0.2 \times $60 = $12; $60 - $12 = $48$$

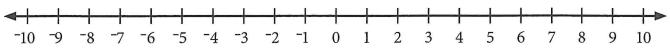
Chapter 17 Assessment

Name _____

Write > or < to compare.

Write the numbers from least to greatest.

Use the number line to solve the equation.



8.
$$^{-}3 + 3 = 0$$

9.
$$8 + ^{-}1 = _{-}7$$

10.
$$2 + \overline{} 7 = \underline{} 5$$

11.
$$-2 + -2 = -4$$

12.
$$^{-}6 + ^{-}2 = \underline{^{-}8}$$

13.
$$^{-}7 + 5 = ^{-2}$$

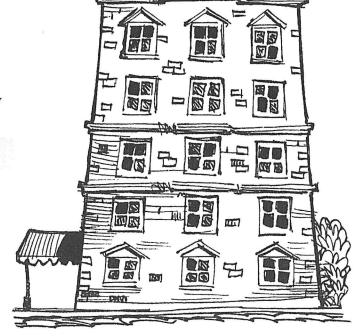
Write a positive or negative number to match the phrase.

- 15. twenty-dollar increase in pay 20
- 16. fifty dollars earned <u>50</u>
- 17. six miles under the speed limit ___6

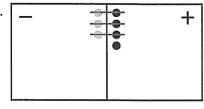
Solve and label your answer.

18. The five-story apartment building has an underground parking garage. If the building has a seven-floor elevator, how many floors are in the parking garage?

2 floors

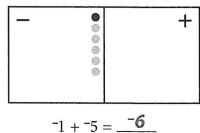


19.

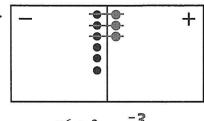


$$4 + ^{-}3 = _{-}1$$

21.

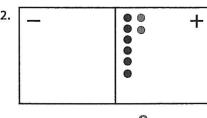


20



$$-6 + 3 =$$

22.



6 + 2 = _______

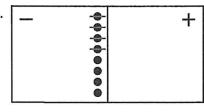
The minuend is on the mat. Draw counters for the subtrahend as needed. Solve.

23.



$$6 - 10 = _{-4}$$

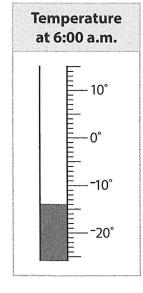
24.

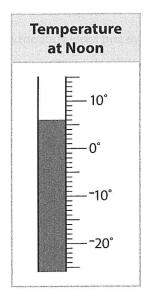


Solve and label your answer. Shade the thermometers to show the temperatures.

25. One day last winter the temperature at 6:00 a.m. was -14°F. If the temperature rose 20 degrees by noon, what was the temperature at noon?

6ºF





Chapter 18 Assessment

Use the pictograph to find the answer.

- 1. Who spent the most money? __Paul_
- 2. How much more did Paul spend than Mark? __\$200
- 3. Who spent \$375? **Ezekiel**
- 4. How much did Joseph spend? \$\square\$250

Money Spent for Camp		
Joseph	[000] [000] [00	
Mark	K-6-3 K-6-3	
Paul	[6 0 2 E 6 0] E 6 0]	
Ezekiel	Pogod Pogod Pogo	

Use the line plot to find the answer.

Goals Scored per Soccer Game

- 5. Scores were recorded for ? games.
 - 07
- 11
- \bigcirc 24
- 6. The most goals scored in a game was ?.
 - O1
- O_4
- **6**
- 7. In how many games did the team score no goals?
 - 00
- **2**
- \bigcirc 3

Use the data to complete the stem-and-leaf plot. Answer the questions.

The scores for the science test were 95, 82, 78, 95, 89, 92, 95, 84, and 100.

- 8. What is the range of the test scores?
 - \bigcirc 3
- 22
- O 100
- 9. The median test score is ?.
 - 92
- O 94
- O 99
- 10. The mode of the test scores is ?.
 - O 92
- 95
- O 99
- 11. The mean (average) of the test scores is ?..
 - O 79
- 90
- O 98

Science Test Scores	
Stem	Leaf
7	8
8	2 4 9
9	2 5 5 5
10	0

Key:
$$9|2 = 92$$

Use the bar graph to find the answer.

12. Which year shows a steady increase of visitors from April to July?

2020

13. During which 2 months in 2019 did the museum have the same number of visitors?

April and June

14. During which month in 2019 did the museum have the greatest number of visitors?

May

15. During which month did the museum have fewer visitors in 2020 than in 2019?

May

Use the line graph to find the answer.

16. Were the temperatures cooler on May 28 or 29?

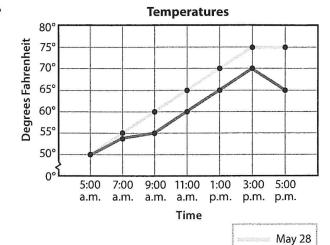
May 29

17. At what time of day was the temperature the same for both days?

5:00 a.m.

18. At what time of day on May 29 was the temperature 70°F?

3:00 p.m.



Visitors to the Art Museum

Months

July

2019

2020

20

19

18 17 16

15

13

April

Visitors (in thousands)

Use the circle graph to find the answer.

19. What type of furniture sold the most?

sofas

20. About what fraction of the furniture sold was beds?

 $\frac{7}{4}$

21. Which two types of furniture sold about the same?

chairs, tables



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May 29