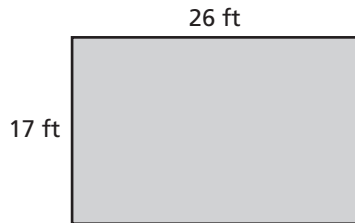


Chapter 1 Cumulative Assessment

- What is the prime factorization of the number 60?
 - A. $3 \cdot 4 \cdot 5$
 - B. $2 \cdot 3 \cdot 5$
 - C. $2^2 \cdot 3 \cdot 5$
 - D. $2 \cdot 3^2 \cdot 5$

- What is the area of the rectangle below?



- F. 136 ft^2
 - G. 208 ft^2
 - H. 402 ft^2
 - I. 442 ft^2
- GRIDDED RESPONSE** The table below shows the amount of snow on the ground at different times of the day. How many inches of snow fell between 8:00 A.M. and 10:00 A.M.?

Time	Snow (inches)
8:00 A.M.	$3\frac{5}{8}$
10:00 A.M.	$4\frac{1}{2}$

- A northbound bus and a southbound bus are at a bus stop at the same time. The northbound bus returns to the bus stop every 20 minutes and the southbound bus returns to the bus stop every 25 minutes. How long will it be before both buses are at the bus stop at the same time again?
 - A. 50 minutes
 - B. 100 minutes
 - C. 200 minutes
 - D. 500 minutes
- Which operation should you perform first when you evaluate the following expression?

$$15 - 8 \div (4 - 2) \times 3$$

- F. Subtract 8 from 15.
- G. Divide 8 by 4.
- H. Subtract 2 from 4.
- I. Multiply 2 by 3.

**Chapter
2****Cumulative Assessment**

- Corey works for a landscaping company. On Tuesday, he fertilized 4 lawns. He used $2\frac{1}{3}$ bags of fertilizer on each lawn. How much fertilizer did Corey use?
 - $2\frac{1}{3}$
 - $6\frac{1}{3}$
 - $8\frac{1}{3}$
 - $9\frac{1}{3}$
- Which number is equivalent to $1.58 + 0.437$?
 - 0.595
 - 1.495
 - 1.917
 - 2.017
- For a Cub Scout meeting, the leader bought 4 pizzas, and $1\frac{1}{2}$ of the pizzas contained pepperoni. The scouts ate $\frac{5}{6}$ of the pizzas that contained pepperoni. The remaining pizza that contains pepperoni represents what fraction of the 4 pizzas that the leader bought?
 - $\frac{1}{16}$
 - $\frac{1}{4}$
 - $\frac{5}{4}$
 - $\frac{10}{3}$
- GRIDDED RESPONSE** Beatrice bought 8 sandwiches for \$40.72. Each sandwich was the same price. What was the price, in dollars, of each sandwich?
- What is the least common multiple of 5, 8, and 12?
 - 24
 - 60
 - 120
 - 480
- What is the value of the expression below?
$$0.08 \div 0.02$$
 - 0.0004
 - 0.04
 - 4
 - 400

**Chapter
2**

Cumulative Assessment (continued)

7. An architect is designing a house in which a 104-square-foot room and a 130-square-foot room share a wall. What is the greatest possible integer length of the shared wall?

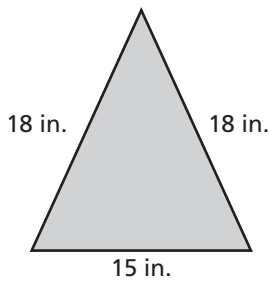
- F. 8 ft
- G. 10 ft
- H. 13 ft
- I. 130 ft

8. Mario is multiplying two decimal numbers. His work so far is shown in the box to the right. What should Mario do in order to complete his work correctly?

$\begin{array}{r} 45.36 \\ \times 0.07 \\ \hline 31752 \end{array}$

- A. Place a decimal in the product between the 3 and the 1.
- B. Place a decimal in the product between the 1 and the 7.
- C. Place a decimal in the product between the 7 and the 5.
- D. Place a decimal in the product between the 5 and the 2.

9. What is the perimeter of the triangle below?



- F. 23 in.
- G. 33 in.
- H. 41 in.
- I. 51 in.

10. **SHORT RESPONSE** A garden snail named Archie set a world record while winning the 1995 World Snail Racing Championship.

Part A Archie completed the 0.33 meter course in 2 minutes. What was Archie’s average rate of speed, in **meters per second**? Show your work and explain your reasoning.

Average speed: _____ meters per second

Part B Assuming that Archie crawls at a constant speed, how far will he travel in 3 minutes?

Distance: _____ meter(s)

**Chapter
3****Cumulative Assessment**

- An ice cream shop charges \$3.39 for a dish of ice cream. A customer can also order toppings for \$0.59 each. If x represents the number of toppings, which expression can be used to determine the total charge, in dollars, for a dish of ice cream with x toppings?
 - $339x + 0.59$
 - $3.39 + 0.59x$
 - $3.98 + x$
 - $3.98x$
- The world's tallest living man is $8\frac{1}{4}$ feet tall and the world's shortest living man is $1\frac{3}{4}$ feet tall. How many times taller is the tallest living man than the shortest living man?
 - $4\frac{5}{7}$
 - $8\frac{3}{16}$
 - $8\frac{1}{3}$
 - $14\frac{7}{16}$
- GRIDDED RESPONSE** A player's score in the game of horseshoes is based on the number of "ringers" r and the numbers of horseshoes closest to the stake c that a player throws. Use the formula below to determine the score of a player who throws 4 ringers and 7 horseshoes closest to the stake.
$$3r + c$$
- Which equation is true for all numbers a ?
 - $a + 0 = a$
 - $a + 1 = 1$
 - $a \times 0 = a$
 - $a \times 1 = 1$
- Sheryl earns money for college by walking dogs and by mowing lawns. She earns \$3 for each dog she walks and \$25 for each lawn she mows. Which expression can be used to determine the amount of money, in dollars, Sheryl earns from walking w dogs and mowing m lawns?
 - $3w + 25m$
 - $3w + 25$
 - $28(w + m)$
 - $75(w + m)$
- Which number is equivalent to the expression $(89)(46)$?
 - 880
 - 890
 - 3094
 - 4094

**Chapter
3**

Cumulative Assessment (continued)

7. The steps Irena took to simplify an expression are shown below. What should Irena change in order to simplify the expression correctly?

$$\begin{aligned}
 12(48 + 24) &= 12 \times 48 + 24 \\
 &= 576 + 24 \\
 &= 600
 \end{aligned}$$

- F. Multiply 48 and 24 by 12. H. Divide 48 and 24 by 12.
- G. Add 12 to $(48 + 24)$. I. Multiply 24 by $(48 + 12)$.
8. Hector wants to calculate the quotient $23.7 \div 1.58$ by converting the divisor to a whole number. Which of the following quotients is equivalent to $23.7 \div 1.58$?
- A. $158 \overline{)23.7}$ C. $158 \overline{)2370}$
- B. $158 \overline{)237}$ D. $1580 \overline{)2370}$

9. **EXTENDED RESPONSE** The total cost, in cents, to operate an electrical appliance can be represented by the formula below.

$$\frac{Wtc}{1000}$$

In the formula, W represents the number of watts used by an appliance, t represents the time, in hours, the appliance is used, and c represents the cost, in cents, per kilowatt-hour used. Brianne uses two appliances frequently.

The electricity provider charges Brianne’s family 10 cents per kilowatt-hour used.

Part A On a typical day, Brianne uses her computer for 3 hours and her hair dryer for 10 minutes. What is the total cost of using both appliances for 6 days? Show your work.



300 watts



1800 watts

Total cost using both appliances for 6 days: _____ cents

Part B To save money, Brianne reduces her computer usage by 1 hour per day and only uses her hair dryer every other day. How much money will the family save in 60 days? Show your work and explain your reasoning.

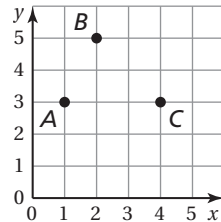
Money saved: \$ _____

Chapter 4

Cumulative Assessment

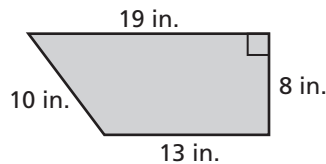
1. Which description represents the area of a parallelogram?
 - A. the product of the length and the height
 - B. the sum of all of the side lengths
 - C. the square of the side length
 - D. four times the length

2. The coordinate plane shows three vertices of a parallelogram. Which ordered pair could represent the fourth vertex of the parallelogram?



- F. (3, 5)
 - G. (4, 5)

 - H. (5, 5)
 - I. (6, 5)
3. Which expression represents the area of the trapezoid?



- A. $\frac{1}{2} \cdot 8 \cdot (13 + 19)$
 - B. $8 \cdot 19$

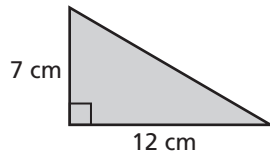
 - C. $(8 + 10) \cdot 13 \div 2$
 - D. $10 + 13 + 8 + 19$
4. Which expression is equivalent to $\frac{4}{7} \div \frac{8}{15}$?

- F. $\frac{14}{15}$
 - G. $1\frac{1}{15}$

- H. $1\frac{1}{14}$
 - I. $1\frac{14}{15}$

**Chapter
4****Cumulative Assessment** (continued)

5. **GRIDDED RESPONSE** What is the area, in square centimeters, of the triangle below?



6. What property was used to simplify the expression?

- A. addition property of zero
 B. distributive property
 C. commutative property of addition
 D. associative property of addition

$$\begin{aligned} 25 + 17 + 75 &= 25 + 75 + 17 \\ &= 100 + 17 \\ &= 117 \end{aligned}$$

7. What is the value of 7^3 ?

- F. 21
 G. 49
 H. 343
 I. 2187

8. The cost for admission into a football game at your school is shown. If 120 adults and 165 students attend the game, which expression represents the amount of money collected on the night of the game?

- A. $120(4.25 + 5.50) + 165$
 B. $(120 + 165)4.25$
 C. $120(4.25) + 165(5.50)$
 D. $120(5.50) + 165(4.25)$

Ticket	Cost per ticket
Adult	\$5.50
Student	\$4.25

9. What is the value of $6.58 - 3.745 + 10.303$?

- F. 12.138
 G. 13.138
 H. 13.148
 I. 14.148

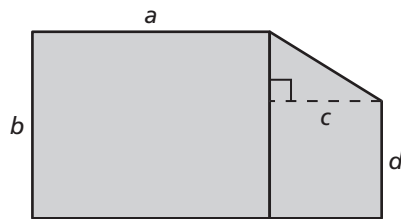
10. **SHORT RESPONSE** The parking lot next to a business is shaped like a trapezoid. The shorter base and the height are both 60 feet long. The longer base is twice as long as the shorter base. Write and evaluate an expression to find the area of the parking lot. Explain your reasoning.

Chapter 5 Cumulative Assessment

1. A pet sitting service charges \$23 for the first visit and \$19 for each additional visit in a week. If v represents the number of visits in a week, which expression can be used to determine the total charge, in dollars, for v visits?

- A. $23v - 19$
- B. $23 + 19v$
- C. $23 + 19(v - 1)$
- D. $23 + 19(v + 1)$

2. Which expression represents the area of the figure below?



- F. $ab + cd$
- G. $ab + \frac{1}{2}bc$
- H. $ab + \frac{1}{2}c(b + d)$
- I. $ab + bc$

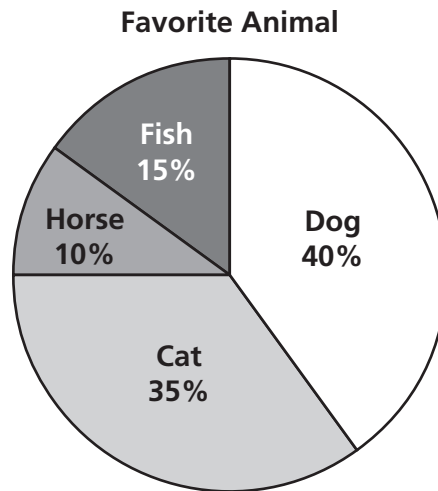
3. The sixth grade, which is divided into four classes, holds a fundraising competition. Which class raises the most money per student?

Class	A	B	C	D
Money raised	\$450	\$425	\$560	\$390
Students	30	25	35	30

- A. Class A
 - B. Class B
 - C. Class C
 - D. Class D
4. Which equation is NOT true for all numbers n ?
- F. $n + 8 = 8 + n$
 - G. $n \times 8 = 8 \times n$
 - H. $n + 0 = n$
 - I. $n \times 0 = n$
5. **GRIDDED RESPONSE** The ratio of offensive players to defensive players on a football team is 4 : 3. There are 21 defensive players on the team. How many offensive players are there?

**Chapter
6****Cumulative Assessment**

- Which of the following points is the reflection of $(8, -5)$ in the y -axis?
 - $(8, 5)$
 - $(-5, 8)$
 - $(-8, 5)$
 - $(-8, -5)$
- A survey asked 80 students to name their favorite animal. The results are shown in the circle graph.



You survey 20 more students. How many do you expect to say cats are their favorite animal?

- 7
 - 8
 - 12
 - 28
- GRIDDED RESPONSE** What is the least common multiple of 10 and 16?
 - Which set of ordered pairs are the vertices of a square?
 - $W(1, 0), X(1, 3), Y(3, 1), Z(3, 0)$
 - $W(-4, 2), X(-1, 2), Y(-1, -2), Z(-4, -2)$
 - $W(1, -3), X(4, -2), Y(4, -5), Z(1, -6)$
 - $W(-2, 5), X(2, 5), Y(2, 1), Z(-2, 1)$

Chapter 7

Cumulative Assessment (continued)

6. Which equation is NOT true for all numbers a and b ?

A. $a + (b + c) = (a + b) + c$ C. $a(b + c) = ab + ac$

B. $(a + b) \times 1 = a + b$ D. $a + b + 1 = a + b$

7. Francisco flew a kite for 200 minutes. This was 20 minutes less than 4 times the number of minutes that Victoria flew a kite.

If v represents the number of minutes that Victoria flew a kite, which equation represents the relationship between the number of minutes Francisco and Victoria flew kites?

F. $20 - 4v = 200$

H. $(20 - 4)v = 200$

G. $4v - 20 = 200$

I. $4(v - 20) = 200$

8. Sandra bought a new air conditioner for \$3000. She had to pay 6% sales tax on the cost of the air conditioner. What was the total cost for the air conditioner, including tax?

A. \$18

C. \$3018

B. \$180

D. \$3180

9. **EXTENDED RESPONSE** Donald is hiring employees for his new small business. He expects to produce 6 units per employee, and he expects demand to be at least 36 units per day. He plans to pay each employee a yearly salary of \$50,000, and has budget of \$400,000 per year to pay employees' salaries.

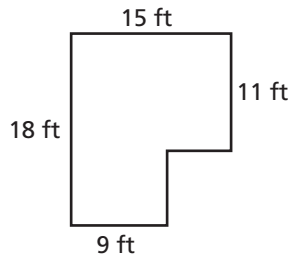
Part A Write and solve two inequalities that describe the number of employees Donald can hire. Graph both solutions on the same number line and use the graph to list three possible numbers of employees that meet the requirements.



Part B After more research, Donald expects the demand to be at least 60 units per day instead of 36 units per day. Is there any number of employees that meets these new requirements? Explain your answer.

Chapter 8 Cumulative Assessment

- Which equation does NOT correctly use the distributive property?
 - A. $a(b + c) = ab + ac$
 - B. $a(b - c) = ab - ac$
 - C. $(a + b)c = ac + bc$
 - D. $a + (b + c) = (a + b) + (a + c)$
- Ms. Wagner’s office is shaped like an upside down L. The dimensions of her office are shown below.



What is the area, in square feet, of Ms. Wagner’s office?

- F. 53
 - G. 171
 - H. 228
 - I. 327
- GRIDDED RESPONSE** The edges of a cube each measure 4 inches. What is the total volume, in cubic inches, of the cube?
 - The steps Bryce took to subtract two mixed numbers are shown to the right. What should Bryce change in order to subtract the two mixed numbers correctly?

$$\begin{array}{r}
 7\frac{3}{8} \rightarrow 6\frac{13}{8} \\
 - 4\frac{7}{8} \rightarrow - 4\frac{7}{8} \\
 \hline
 2\frac{6}{8} = 2\frac{3}{4}
 \end{array}$$

- A. Rename $7\frac{3}{8}$ as $6\frac{11}{8}$.
- B. Rename $7\frac{3}{8}$ as $6\frac{8}{8}$.
- C. Subtract $\frac{3}{8}$ from $\frac{7}{8}$.
- D. Add $\frac{3}{8}$ and $\frac{7}{8}$.

Chapter
9
Cumulative Assessment

1. Which of the following statements is **false**?

A. $-1\frac{3}{4} < -1\frac{3}{5}$

C. $-3\frac{3}{8} > -3\frac{1}{3}$

B. $-2\frac{1}{2} > -2\frac{2}{3}$

D. $-4\frac{1}{4} < -4\frac{1}{6}$

2. The Kuprin family drove 830 miles from Pensacola to Key West. They drove the first 640 miles in 10 hours. The entire trip took 14 hours. What was the Kuprin family's average speed, in miles per hour, for the last 4 hours on the trip?

F. 47.5

H. 64

G. 59.3

I. 83

3. **GRIDDED RESPONSE** At batting practice, 10 batters were each thrown 20 pitches. The numbers of pitches the batters hit are shown below.

5, 16, 8, 8, 11, 7, 3, 6, 4, 2

What is the median number of pitches that the batters hit?

4. The 50-yard dash times, in seconds, for several students are shown below.

6.3, 6.7, 6.7, 7.1, 7.2, 7.5, 7.7, 8.1, 8.4

What is the mean time, in seconds, for these students?

A. 6.7

C. 7.3

B. 7.2

D. 8.4

5. Sarah divided two decimal numbers. Her work is shown in the box below. How should Sarah rewrite the problem in order to divide the two decimal numbers correctly?

$0.6 \overline{)21.54}$	\rightarrow	$6 \overline{)2154}$
-------------------------	---------------	----------------------

F. $0.06 \overline{)21.54}$

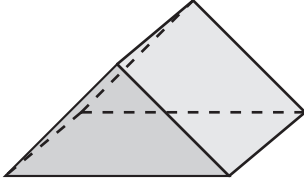
H. $0.6 \overline{)0.2154}$

G. $0.6 \overline{)215.4}$

I. $6 \overline{)215.4}$

**Chapter
9****Cumulative Assessment** (continued)

6. How many faces does the solid have?



- A. 3
B. 5
C. 6
D. 9
7. Which inequality represents the word sentence below?

Four plus a number k is no less than 12.

- F. $4k > 12$
G. $4k \geq 12$
H. $4 + k > 12$
I. $4 + k \geq 12$
8. **EXTENDED RESPONSE** The table below shows the ages of various pieces of equipment in an office.

Part A Display the data in a dot plot. Identify any clusters, peaks, or gaps in the data.

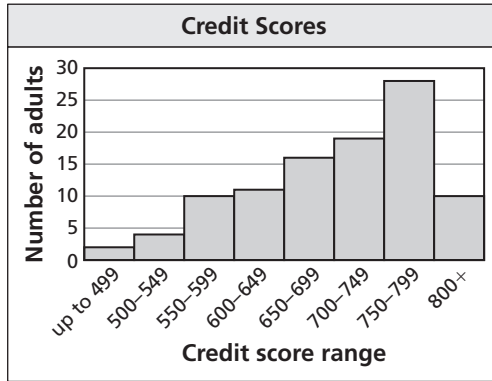
Age (years)				
1	2	3	5	8
1	2	3	5	9
1	2	4	7	9
2	3	4	7	10

Part B Find the mean, median, and mode(s) of the data. Choose the measure that best represents the data. Explain your reasoning.

Chapter 10

Cumulative Assessment

1. The histogram shows the credit scores of 100 adults.



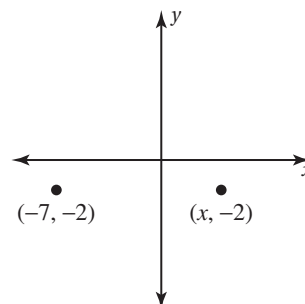
Which measure of center best represents these data?

- A. Mean
B. Median
C. Mode
D. Mean absolute deviation
2. The ages of ten employees at an insurance company are as follows.

43, 42, 51, 38, 52, 42, 21, 37, 47, 47

What is the mean absolute deviation of the ages?

- F. 6
G. 10
H. 31
I. 42
3. **GRIDDED RESPONSE** The distance between the two points graphed below is 11. Find x .



4. What value of n makes the equation true?

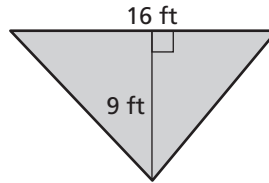
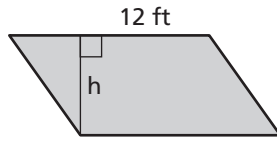
$$\frac{4}{7} \div \frac{n}{2} = \frac{8}{63}$$

- A. 2
B. 8
C. 9
D. 32

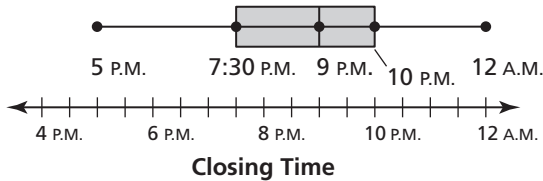
**Chapter
10**

Cumulative Assessment (continued)

5. The parallelogram and the triangle have the same area. What is the height h of the parallelogram?



- F. 4.5
G. 6
H. 9
I. 12
6. The box-and-whisker plot represents the closing times of businesses in a town. What percent of the businesses close at 10 P.M. or later?



- A. 20%
B. 25%
C. 50%
D. 75%
7. Which word sentence is represented by the equation $\frac{b}{3} = 16$?
- F. The quotient of a number b and 3 equals 16.
G. The product of a number b and 3 equals 16.
H. The difference of a number b and 3 equals 16.
I. Three divided by a number b equals 16.
8. **SHORT RESPONSE** The low temperatures, in degrees Fahrenheit, for a city, for a month are listed below:
- 48, 33, 49, 52, 56, 56, 59, 44, 40, 40, 34, 47, 38, 27, 33,
43, 51, 54, 39, 35, 45, 63, 59, 57, 53, 52, 38, 27, 31
- Part A* Make a stem-and-leaf plot of the data.
Part B Display the data in a histogram.