## Unit 1

Answer questions 1-17. Answer questions outlined in green in your test book. Answer all other questions on your Answer Form.

1 Each cube in the prisms below has a volume of 1 cubic inch. Which prism has a volume of 60 cubic inches?


A


B


C


D

2 Ordered pairs in the form ( $x$ term, $y$ term) are written using the following rules: $x$ terms begin at 0 and use the rule "add 4 " to get the next term. $y$ terms begin at 0 and use the rule "add 3 " to get the next term.

The first ordered pair is $(0,0)$. What is the fourth ordered pair using these rules?

Show your work.

Answer

3 In which number does one digit 6 have a value of $\frac{1}{100}$ of the other digit 6?
A 66.04
B 46.60
C 46.06
D 40.66

4 The local bakery sold 144 bags of dinner rolls. There were 36 rolls in each bag. How many dinner rolls did the bakery sell?

A 180
B 324
C 1,796
D 5,184

5 A display case is made of one rectangular prism stacked on top of a second rectangular prism.

[not drawn to scale]

What is the volume, in cubic feet, of the display case? Record your answer and fill in the bubbles on your answer form. Be sure to use the correct place value.

## Part A

Quinn is mixing juices to make punch for a party. Examine each juice mixture. Will all the juice fit into a 1-gallon pitcher? Select Yes or No for each mixture.

| Mixture | Yes | No |
| :---: | :---: | :---: |
| a. 6 pints apple juice and 6 cups cranberry juice | $\bigcirc$ | $\bigcirc$ |
| b. 2 quarts apple juice and 8 cups cranberry juice | $\bigcirc$ | $\bigcirc$ |
| c. 5 pints apple juice and 2 quarts cranberry juice | $\bigcirc$ | $\bigcirc$ |
| d. 9 cups apple juice and 3 pints cranberry juice | $\bigcirc$ | $\bigcirc$ |

## Part B

Quinn has a 300-centimeter ribbon that he will cut into smaller pieces for decorations. Look at each pair of ribbon lengths. Could he cut both lengths from the original ribbon? Select Yes or No for each pair of ribbon lengths.

| Pairs of Ribbon Lengths | Yes | No |
| :--- | :---: | :---: |
| a. 1.8 meters and 110 centimeters | $\bigcirc$ | $\bigcirc$ |
| b. 200 centimeters and 2 meters | $\bigcirc$ | $\bigcirc$ |
| c. 0.63 meter and 230 centimeters | $\bigcirc$ | $\bigcirc$ |
| d. 17 centimeters and 2.9 meters | $\bigcirc$ | $\bigcirc$ |

7 What are the coordinates of the point on the graph?


A $(5,0)$
B $(0,7)$
C $(5,7)$
D $(7,5)$

8 To pass inspection, a machine part from a factory must be no thinner than 4.225 centimeters and no thicker than 4.233 centimeters. Which two machine part thicknesses would result in failing the inspection?

A 4.227 centimeters
B $\quad 4.23$ centimeters
C 4.234 centimeters
D 4.24 centimeters
E 4.226 centimeters

9 Jamie can walk to school in $\frac{3}{4}$ hour. The model below shows the total number of hours he walked over three days.


Which equation is represented by the model?
A $\quad \frac{3}{4} \times 2=\frac{9}{4}$
B $\quad \frac{3}{4} \times 3=\frac{9}{4}$
C $\quad \frac{3}{4} \times 3=\frac{9}{12}$
D $\quad \frac{3}{4} \times 4=\frac{5}{2}$

10 Which statement is true?
A All parallelograms are squares.
B All parallelograms are rhombuses.
C All rectangles are squares.
D All squares are rhombuses.

11 Which expression has the greatest value?
A $(15-10) \times(4+3)$
B $(15-10) \times(4-3)$
C $(15+10) \times(4+3)$
D $(15+10) \times(4-3)$

12 Examine the figure below.

| 80 | 2 |
| :---: | :---: |
| 30 | 2,400 |
| 7 | 60 |
| 560 | 14 |

Which division equation is shown by the area model?
A $574 \div 37=82$
B $\quad 2,460 \div 37=82$
C $3,034 \div 82=37$
D $3,034 \div 110=9$

13 Each set of measurements describes a rectangular prism. Is the prism also a unit cube? Select Yes or No for each prism.

| Prism | Yes | No |
| :--- | :---: | :---: |
| a. 1 foot $\times 1$ foot $\times 1$ foot | $\bigcirc$ | $\bigcirc$ |
| b. 1 yard $\times 1$ yard $\times 1$ yard | $\bigcirc$ | $\bigcirc$ |
| c. $\frac{1}{2}$ inch $\times \frac{1}{4}$ inch $\times \frac{1}{64}$ inch | $\bigcirc$ | $\bigcirc$ |
| d. 1.5 meters $\times 1.5$ meters $\times 1.5$ meters | $\bigcirc$ | $\bigcirc$ |

## Part A

Select the value that each number rounds to when rounded to the nearest tenth. Select 4.9 or 5.0 for each value.

| Value | 4.9 | 5.0 |
| :--- | :---: | :---: |
| a. 4.95 | $\bigcirc$ | $\bigcirc$ |
| b. 4.87 | $\bigcirc$ | $\bigcirc$ |
| c. 4.93 | $\bigcirc$ | $\bigcirc$ |
| d. 5.04 | $\bigcirc$ | $\bigcirc$ |

## Part B

Select the value that each number rounds to when rounded to the nearest hundredth. Select 8.10 or 8.20 for each value.

| Value | $\mathbf{8 . 1 0}$ | $\mathbf{8 . 2 0}$ |
| :--- | :---: | :---: |
| a. 18.095 | $\bigcirc$ | $\bigcirc$ |
| b. 8.197 | $\bigcirc$ | $\bigcirc$ |
| c. 8.104 | $\bigcirc$ | $\bigcirc$ |
| d. 8.195 | $\bigcirc$ | $\bigcirc$ |

15 Which model represents the product $\frac{5}{8} \times \frac{3}{8}$ ?


16 The volume of Olivia's rectangular lunchbox is 240 cubic inches. The lunchbox has a height of 3 inches, and its length is 2 inches more than its width. How wide is Olivia's lunchbox?

## Show your work.

Answer $\qquad$ inches

17 Select the two situations that could be modeled by each given expression.

## Part A

$\frac{1}{4} \div 6$
A Marcus adds $\frac{1}{4}$ cup of walnuts to each of 6 batches of muffins.
B Marcus has $\frac{1}{4}$ cup of walnuts to use for 6 batches of muffins.
C Marcus fills 6 cups in a muffin tin using $\frac{1}{4}$ cup of the batter.
D Marcus fills 6 cups in a muffin tin with $\frac{1}{4}$ cup of batter each.
E Marcus has $\frac{1}{4}$ cup of batter left after making 6 muffins.

## Part B

$$
3 \div \frac{1}{5}
$$

A Andrea spends $\frac{1}{5}$ hour cleaning each stall in the barn. She works for 3 hours.
B Andrea spends $\frac{1}{5}$ hour cleaning each of 3 stalls in the barn.
C Andrea uses up 3 bales of hay by putting $\frac{1}{5}$ bale into each stall.
D Andrea has 3 bales of hay to divide evenly among 5 stalls.

E Andrea spends 5 hours cleaning 3 stalls.

## Unit 2

## Answer questions 18-36. Answer questions outlined in green in your test book. Answer all other questions on your Answer Form.

18 The Ryan family pays $\$ 569$ in taxes every three months on a piece of property they own. If the taxes don't change, how much will they pay in taxes over 15 years?

Record your answer and fill in the bubbles on your answer form. Be sure to use the correct place value.

19 Which expression represents "the product of 8 and the sum of 9 and $\frac{3}{4}$ "?
A $\frac{3}{4}-(8 \times 9)$
B $\quad 8\left(9+\frac{3}{4}\right)$
C $8+\left(9-\frac{3}{4}\right)$
D $\quad 9\left(8-\frac{3}{4}\right)$

20 The line plot shows the weights, in pounds, of rock samples collected by Charlotte.

## ROCK SAMPLE WEIGHTS



## Part A

Which question can be answered using the data in the line plot?

A What is the total weight of the rocks Charlotte collected?

B How many of the rocks weigh between $\frac{5}{8}$ pound and $\frac{3}{4}$ pound?
C What is the total weight of the first three rocks Charlotte collected?

D How many more rocks does Charlotte need to collect?

## Part B

Which three statements are true?

A The heaviest rock is $\frac{5}{8}$ pound heavier than the lightest rock.
B Most of the rocks weigh less than $\frac{5}{8}$ pound.
C The three heaviest rocks have a combined weight of less than 3 pounds.
D Half of the rocks weigh more than $\frac{1}{2}$ pound.
E The three lightest rocks have a combined weight of $\frac{5}{8}$ pound.

21 The map shows some landmarks in Keith's hometown.


## Part A

Which ordered pair represents the location of the school?
A $(7,6)$
B $(6,7)$
C $(3,3)$
D $(0,0)$

## Part B

Which ordered pair represents the location of the library?
A $(5,5)$
B $\quad(8,8)$
C $(5,8)$
D $(8,5)$

22 What is the value of this expression?

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

A $3 \frac{5}{6}$
B $3 \frac{1}{6}$
C $2 \frac{5}{6}$
D $2 \frac{3}{6}$

23 Describe how to move the decimal point in the dividend 6,000 to find the quotient $6,000 \div 10^{5}$.

Choose from the numbers and words below to complete the statement.
$\begin{array}{lllll}3 & 5 & 6 & 10 & \text { left right }\end{array}$

Answer Move the decimal point $\qquad$ places to the $\qquad$ .

## Part A

What is the product $247 \times 6,782$ ?
A $1,403,874$
B 1,431,002
C $1,675,154$
D 1,858, 268

## Part B

What is the product $618 \times 7,339$ ?
A $4,462,112$
B $4,469,451$
C $4,476,790$
D 4,535,502

## Part A

Decide whether each product is less than or greater than $19 \times 12$. Select Less Than or Greater Than for each product.

| Product | Less Than | Greater Than |
| :--- | :---: | :---: |
| a. $19 \times \frac{25}{2}$ | $\bigcirc$ | $\bigcirc$ |
| b. $19 \times 15 \frac{1}{2}$ | $\bigcirc$ | $\bigcirc$ |
| c. $19 \times 10 \frac{1}{2}$ | $\bigcirc$ | $\bigcirc$ |
| d. $19 \times \frac{22}{2}$ | $\bigcirc$ | $\bigcirc$ |

## Part B

Decide whether each product is less than or greater than $\frac{1}{4} \times 5$. Select Less Than or Greater Than for each product.

| Product | Less Than | Greater Than |
| :--- | :---: | :---: |
| a. $\frac{1}{3} \times 5$ | $\bigcirc$ | $\bigcirc$ |
| b. $\frac{1}{5} \times 5$ | $\bigcirc$ | $\bigcirc$ |
| c. $\frac{1}{4} \times \frac{5}{2}$ | $\bigcirc$ | $\bigcirc$ |
| d. $\frac{1}{4} \times 6$ | $\bigcirc$ | $\bigcirc$ |

26 A box is completely filled by 18 unit cubes. What is the volume of the box?

Answer The volume of the box is $\qquad$ cubic inches.

27 Leo spent $\frac{5}{12}$ hour practicing free throws and $\frac{2}{5}$ hour practicing 3-point shots. What is the best estimate of the total time that Leo spent working on these basketball skills?

A A little less than $\frac{1}{2}$ hour because $\frac{5}{12}$ and $\frac{2}{5}$ are both slightly less than $\frac{1}{2}$.
B A little less than 1 hour because $\frac{5}{12}$ and $\frac{2}{5}$ are both slightly less than $\frac{1}{2}$.
C A little more than 1 hour because $\frac{5}{12}$ and $\frac{2}{5}$ are both slightly greater than $\frac{1}{2}$.
D A little more than $1 \frac{1}{2}$ hours because $\frac{5}{12}$ and $\frac{2}{5}$ are both slightly greater than $\frac{3}{4}$.

28 Hal has 16 gallons of water. If he drinks $\frac{1}{2}$ gallon every day, how many days will the water last? Record your answer and fill in the bubbles on your answer form. Be sure to use the correct place value.

29 What is the product of 256 and 24?
A 1,206
B 1,536
C 6,144
D 6,400

30 All parallelograms have two pairs of opposite sides that are parallel and all squares are parallelograms. Based on this description, which statement is true?

A All squares have two pairs of opposite sides that are parallel.
B All squares have two pairs of opposite sides that are perpendicular.
C All squares have four right angles.
D All squares have four sides that are the same length.

31 In which number does one digit 8 have a value of 100 times the other digit 8?
A 8.028
B 20.88
C 28.80
D 28.08

32 The platform of a sculpture is made of two rectangular prisms.


How many cubic meters larger is the volume of the bottom prism of the platform than the top prism? Record your answer and fill in the bubbles on your answer form. Be sure to use the correct place value.

33 Charlotte has a piece of string that is 14 feet long. She cuts it into pieces that are each $\frac{1}{3}$ foot long. How many cut pieces does Charlotte have? Record your answer and fill in the bubbles on your answer form. Be sure to use the correct place value.

34 Each set of measurements describes a rectangular prism. Is the prism also a unit cube? Select Yes or No for each prism.

| Prism | Yes | No |
| :--- | :---: | :---: |
| a. 1 foot $\times \frac{3}{4}$ foot $\times \frac{3}{4}$ foot | $\bigcirc$ | $\bigcirc$ |
| b. 1 centimeter $\times 1$ centimeter $\times 1$ centimeter | $\bigcirc$ | $\bigcirc$ |
| c. 3.6 meters $\times 3.6$ meters $\times 3.5$ meters | $\bigcirc$ | $\bigcirc$ |
| d. 1 yard $\times 1$ yard $\times 1$ yard | $\bigcirc$ | $\bigcirc$ |

## Part A

Select the value that each number rounds to when rounded to the nearest tenth. Select 7.9 or 8.0 for each value.

| Value | 7.9 | 8.0 |
| :--- | :---: | :---: |
| a. 7.95 | $\bigcirc$ | $\bigcirc$ |
| b. 8.03 | $\bigcirc$ | $\bigcirc$ |
| c. 7.96 | $\bigcirc$ | $\bigcirc$ |
| d. 7.87 | $\bigcirc$ | $\bigcirc$ |

## Part B

Select the value that each number rounds to when rounded to the nearest hundredth. Select 4.30 or 4.40 for each value.

| Value | 4.30 | 4.40 |
| :--- | :---: | :---: |
| a. 4.295 | $\bigcirc$ | $\bigcirc$ |
| b. 4.404 | $\bigcirc$ | $\bigcirc$ |
| c. 4.302 | $\bigcirc$ | $\bigcirc$ |
| d. 4.399 | $\bigcirc$ | $\bigcirc$ |

36 A business pays $\$ 4,615$ per month for the mortgage on its building. How much will the business pay for the mortgage over 25 years?

A $\$ 1,384,500$
B $\$ 1,381,800$
C $\$ 1,357,500$
D $\$ 1,153,750$

Name $\qquad$
Teacher $\qquad$ Grade $\qquad$

## End-of-Year Assessment 2

## Unit 1

1. (A) (B) (C) (D)
2. See page 59 .
3. (A) (B) (C) (D)
4. (A) (B) (C) (D)
5. 


6. See page 61.
7. (A) (B) (C) (D)
8. (A) (B) (C) (D) (E)
9. (A) (B) (C) (D)
10. (A) (B) (C) (D)
11. (A) (B) (C) (D)
12. (A) (B) (C) (D)
13. See page 64.
14. See page 65.
15. (A) (B) (C) (D)
16. See page 67.

17A. (A) (B) (C) (D) (E)
17B. (A) (B) (C) (D) (E)

## TEACHER USE ONLY

2. (0) (1)
3. (0) (1) (2)
4. (0) (1)
5. (0) (1) (2)
6. (0) (1)

Name $\qquad$
Teacher $\qquad$ Grade $\qquad$

## End-of-Year Assessment 2 (continued)

## Unit 2

18. 


19. (A) (B) (C) (D)

20A. (A) (B) (C) (D)
20B. (A) (B) (C) (D) (E)
21A. (A) (B) (C) (D)
21B. (A) (B) (C) (D)
22. (A) (B) (C) (D)
23. See page 71.

24A. (A) (B) (C) (D)
24B. (A) (B) (C) (D)
25. See page 73.
26. See page 74.
27. (A) (B) (C) (D)
28.

29. (A) (B) (C) (D)
30. (A) (B) (C) (D)
31. (A) (B) (C) (D)
32.

33.

34. See page 76.
35. See page 77.
36. (A) (B) (C) (D)

## TEACHER USE ONLY

23. (0) (1)
24. (0) (1) (2)
25. (0) (1)
26. (0) (1)
27. (0) (1) (2)
