

- 1 The product of the following expression is 10,132.

$$\begin{array}{r} 298 \\ \times 3\boxed{} \\ \hline \end{array}$$

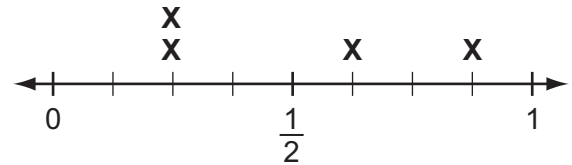
What is the unknown digit?

- (A) 0 (C) 4
(B) 2 (D) 6

- 2 What is the value of the expression $79.36 \div 6.2$?

- (A) 12.3
(B) 12.8
(C) 123
(D) 128

- 3 The line plot shows the amount of water in liters in 4 vases.



Amount of Water in Each Vase
(liters)

How much water would each vase contain if the total amount of water in all 4 vases was redistributed equally?

- 4 Which expression correctly rewrites $8 \times \frac{1}{4} \times 12 + 10$ with parentheses so that it has a value of 104?

- (A) $(8 \times \frac{1}{4}) \times 12 + 10$
(B) $8 \times \frac{1}{4} \times (12 + 10)$
(C) $8 \times (\frac{1}{4} \times 12 + 10)$
(D) $(8 \times \frac{1}{4}) \times (12 + 10)$

- 5** Josephine multiplies $\frac{3}{8}$ by another fraction. The product is less than $\frac{3}{8}$. What fraction could she have multiplied by?

Select **all** the correct answers.

- Ⓐ $\frac{3}{24}$ Ⓓ $\frac{8}{8}$
 Ⓑ $\frac{8}{24}$ Ⓔ $\frac{8}{3}$
 Ⓒ $\frac{3}{3}$

- 6** Frankie had $2\frac{3}{5}$ pounds of modeling clay. He used $\frac{2}{5}$ of the clay to make a sculpture. How many pounds of clay did he use?

- Ⓐ $1\frac{1}{25}$ pounds
 Ⓑ $1\frac{14}{25}$ pounds
 Ⓒ $2\frac{1}{5}$ pounds
 Ⓓ $2\frac{6}{25}$ pounds

- 7** Abdul wants to find the value of the expression $\frac{4}{5} + \frac{3}{7}$. He rewrites the expression so that the fractions have a common denominator. What new expression could Abdul have written?
- _____

- 8** Select **all** the expressions that have a value of 8.

- Ⓐ $210 \div 35$
 Ⓑ $256 \div 32$
 Ⓒ $266 \div 38$
 Ⓓ $360 \div 45$
 Ⓔ $376 \div 47$

- 9** Which number completes the expression $3.25 \times \square = 32,500$?

- Ⓐ 100 Ⓒ 10,000
 Ⓑ 1,000 Ⓓ 100,000

- 10** During track season last year, Sierra's fastest time for running a certain race was 59.6 seconds. This year, her fastest time for running the same race was 3.23 seconds faster. What was Sierra's race time this year?
- _____

- 11** Both Jeff and Juan pledged to read a certain number of books in their school's book-a-thon.

- Jeff pledged to read 12 books.
- Juan pledged to read 4 books and has read $\frac{1}{2}$ of them.
- Together, they have read $\frac{11}{16}$ of the total number of books they pledged to read.

How many books has Jeff read?

- Ⓐ 7
- Ⓑ 9
- Ⓒ 10
- Ⓓ 14

- 12** What happens to the decimal point when a number is divided by 100?

- Ⓐ It moves 2 places to the left.
- Ⓑ It moves 2 places to the right.
- Ⓒ It moves 3 places to the left.
- Ⓓ It moves 3 places to the right.
- _____

- 13** Dayana is hiking along a trail that is $2\frac{2}{5}$ miles long. After completing $\frac{2}{3}$ of the trail, she stops for a snack. How many miles does Dayana hike before she stops for a snack?
- _____

- 14** Which inequality is true?

- Ⓐ $0.049 > 0.36$
- Ⓑ $0.119 < 0.115$
- Ⓒ $1.05 > 1.047$
- Ⓓ $1.26 < 1.188$

- 15 How many more cubes make up Figure A than Figure B?

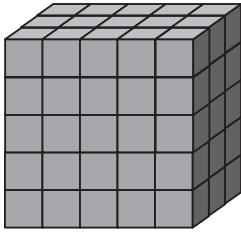


Figure A

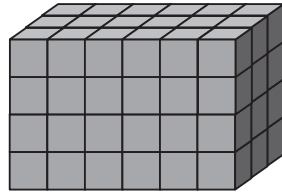
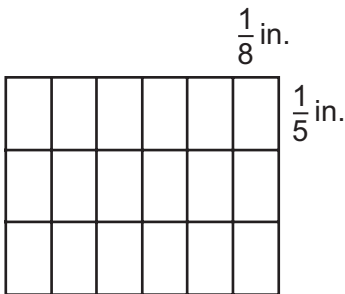


Figure B

- 16 What is the area of the figure in square inches?



- 17 Mary has 40 pounds of popcorn and 30 pounds of pretzels to divide between 12 homerooms. Each homeroom receives the same total amount of popcorn and pretzels. How many total pounds of popcorn and pretzels does each homeroom receive?

- 18 What is the unknown digit in $1,574 \times \square 3 = 36,202$?

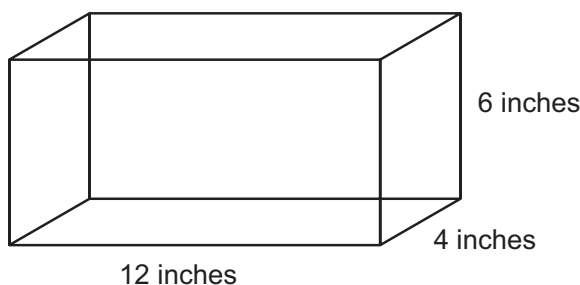
- Ⓐ 1
Ⓑ 2
Ⓒ 4
Ⓓ 8

- 19 Which of the following could be the dimensions of a rectangular prism with a volume of 128 cubic units?

Select **all** the correct dimensions.

- Ⓐ $2 \times 8 \times 8$
Ⓑ $2 \times 32 \times 2$
Ⓒ $4 \times 4 \times 8$
Ⓓ $6 \times 20 \times 8$
Ⓔ $16 \times 8 \times 1$
Ⓕ $32 \times 4 \times 2$

- 20** The rectangular prism below has a volume of 288 cubic inches.



If each of the dimensions is doubled, how much greater is the volume of the new rectangular prism than the original rectangular prism?

- 21** What is the value of the digit 7 in the number 65.371?

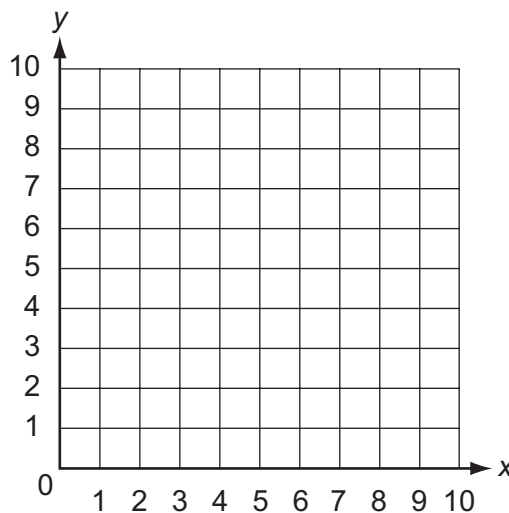
- (A) $\frac{7}{100}$
(B) $\frac{7}{10}$
(C) 70
(D) 700

- 22** Aria follows the rule $(x + 7) \times 4$ to make an input and output table. What does Aria write as the output for the input of 1?

- (A) 4
(B) 8
(C) 16
(D) 32

- 23** Phil is graphing a map of his school on a coordinate plane. He wants to plot his homeroom 2 units right and 1 unit down from the point (8, 9).

Plot a point on the graph to represent the location of Phil's homeroom.



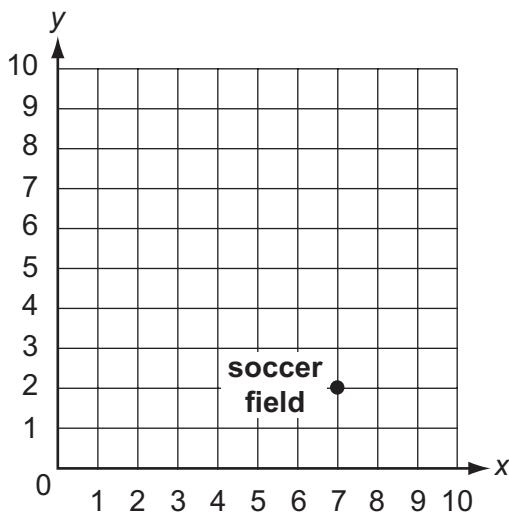
- 24** Circle the words to correctly complete the sentences about the triangles.

A scalene triangle can / cannot be a right triangle.

An equilateral triangle can / cannot be an obtuse triangle.

An isosceles triangle can / cannot be an acute triangle.

- 25** To get to the soccer field graphed on the coordinate plane below, Maggie walked 2 units down and 3 units right from her house.



At which point on the coordinate plane is Maggie's house located?

- Ⓐ (4, 0) Ⓒ (4, 4)
Ⓑ (10, 0) Ⓓ (10, 4)

- 26** Which quadrilateral is both a rhombus and a rectangle?

- Ⓐ square
Ⓑ pentagon
Ⓒ trapezoid
Ⓓ parallelogram

- 27** Demarco has two packages of multicolored sequins. One package has 800 sequins, and the other has 488 sequins. There are 56 different sequin colors, and the two packages combined contain the same number of sequins of each color. How many sequins does Demarco have of each color?

- Ⓐ 20 Ⓒ 32
Ⓑ 23 Ⓓ 56

- 28** Fill in the blanks in the expression to represent "subtract 3 from 5 and then multiply by 4."

_____ × (_____ - _____)

29 What is 6.5078 rounded to the nearest hundredth?

- Ⓐ 6.50
 - Ⓑ 6.51
 - Ⓒ 6.507
 - Ⓓ 6.508
-

30 Jessie has 2.5 liters of lemonade to sell. She sells 3 glasses that each contain 150 milliliters. How many milliliters of lemonade does Jessie have left?

- Ⓐ 447.5 milliliters
 - Ⓑ 450 milliliters
 - Ⓒ 2,050 milliliters
 - Ⓓ 24,550 milliliters
-

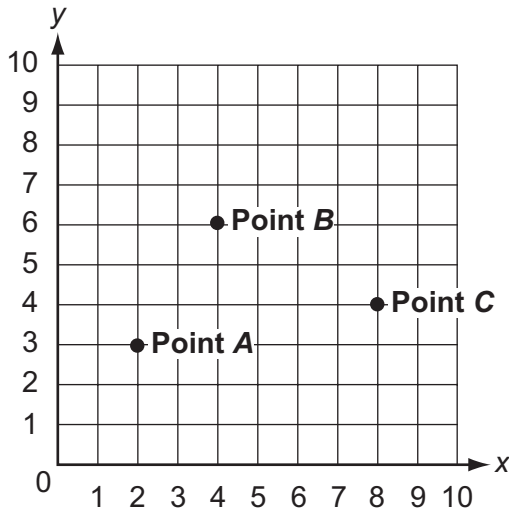
31 A container shaped like a rectangular prism measures 9 centimeters wide and 11 centimeters long. It has a volume of 1,980 cubic centimeters. What is the height of the container?

Fill in the blank with the correct dimension from the list to complete the sentence.

The container is _____ centimeters tall.

9	11	18	20	24
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- 32** A coordinate plane is shown below.



Place an X in the table to show the location of each point.

	(8, 4)	(2, 3)	(4, 6)
Point A			
Point B			
Point C			

- 33** Hannah buys 3.4 pounds of almonds that cost \$3.75 per pound.

Part A

What expression can be used to find the cost of the almonds that she buys?

Part B

How much does Hannah pay for the almonds?

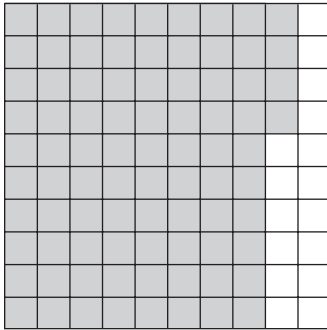
\$ _____

34 Anthony's classroom has its own library of books. In the library, $\frac{3}{5}$ of the books are fiction, and $\frac{1}{6}$ of the books are biographies.

- Anthony said that $\frac{4}{11}$ of the books are either fiction or biographies. Samira said that Anthony made an error. Explain whether Anthony is correct or incorrect and why.
- What fraction of the books in Anthony's classroom library is not fiction or biographies?

Write your answer and explanation in the space provided. Support your answer using words, numbers, and/or symbols.

- 35** Maleisha bought supplies from the school store. The shaded part of the decimal grid below represents the part of \$10.00 that she has remaining after buying her supplies.



Maleisha decides to give all the money she has remaining to her 4 friends so they can buy some notebooks, which cost \$1.00 each. Maleisha gives each friend the same amount of money.

Evelyn, one of Maleisha's friends, claims that if the four friends put their money together, they will be able to buy an additional notebook that they can share.

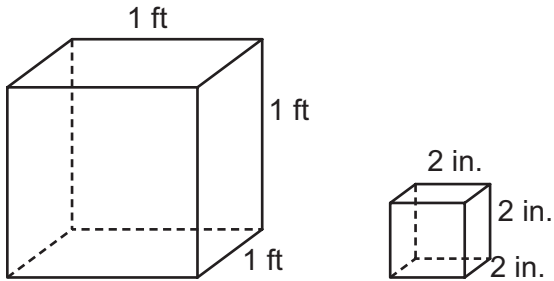
- Is Evelyn's claim correct or incorrect?
- Describe a process that Evelyn could use to find the greatest number of notebooks that each of Maleisha's friends can buy from the school store.
- How many notebooks can each friend buy?

Write your answer and explanation in the space provided. Support your answer using words, numbers, and/or symbols.

- 36** A party consists of 3 parts. The activity portion was $\frac{3}{4}$ of an hour. The craft portion was $\frac{1}{2}$ as long as the activity portion. The food portion was $\frac{1}{2}$ the time of the craft portion. How many hours did the entire party last? Explain your answer.

Write your answer and explanation in the space provided. Support your answer using words, numbers, and/or symbols.

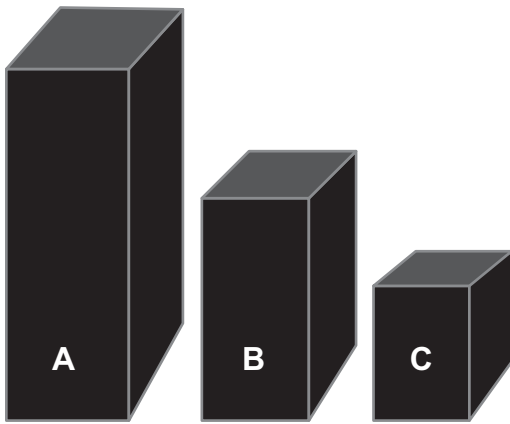
- 37** A video game company put game cartridges into boxes that are 2-inch cubes. These boxes were then packed into the shipping crate shown.



- Find the volume of the cartridge box.
- Find the volume of the shipping crate.
- How many boxes of cartridges were packed into the shipping crate to fill it completely? Explain how you found your answer.

Write your answer and explanation in the space provided. Support your answer using words, numbers, and/or symbols.

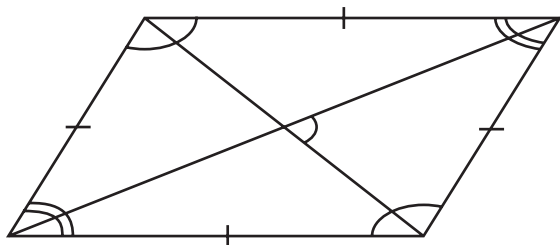
- 38** The diagram below shows a set of three different-size containers used to store flour. The largest container holds $12\frac{1}{3}$ cups of flour. Container B holds $\frac{1}{3}$ of the amount of Container A. Container C holds $\frac{1}{3}$ of the amount of Container B.



- Find the number of cups of flour that Container B holds. Explain how you found your answer.
- Find the number of cups of flour that Container C holds. Explain how you found your answer.
- How many cups of flour can be stored in all three containers?

Write your answer and explanation in the space provided. Support your answer using words, numbers, and/or symbols.

- 39** The diagram below shows a quadrilateral.



- Why is the figure a rhombus?
- Why is the figure a parallelogram?
- Why is the figure not a square?

Write your answer and explanation in the space provided. Support your answer using words, numbers, and/or symbols.