

Directions: Answer the following question(s).

1 Which expression correctly shows the sum of 20 and 8 minus the product of 3 and 5?

- A. $(20 + 8) - (3 \times 5)$
- B. $(20 + 8) \times (3 + 5)$
- C. $20 + 8 - 3 + 5$
- D. $20 \times 8 \times 3 \times 5$

2 Patterns X and Y are generated using these rules.

- Pattern X starts with 1 and add 4
- Pattern Y starts with 2 and add 3

Which set of ordered pairs is generated from corresponding terms of Pattern X and Pattern Y?

- A. (1, 2) (5, 5) (9, 8)
- B. (4, 3) (8, 6) (12, 9)
- C. (2,1) (5, 5) (8, 9)
- D. (1, 2) (4, 6) (7, 10)

3 Enter the value of the expression.

$$5 \times (7 + 2) - 13$$

4 $\left(\frac{2}{3} \times \frac{4}{5} \right) + \frac{19}{30}$

- A. $\frac{76}{225}$
- B. $1 \frac{1}{6}$
- C. $1 \frac{7}{15}$
- D. $2 \frac{1}{10}$

5

Directions: Answer the following question(s).

6 Which equation has the same unknown value as $540 \div 12 = \square$?

A. $\square \div 540 = 12$

B. $\square \div 12 = 540$

C. $540 \times \square = 12$

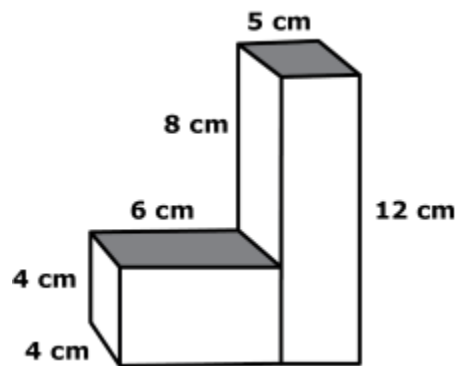
D. $12 \times \square = 540$

7 Round 496.042 to the nearest hundredth. Enter your answer in the response box.

8 Enter the difference.

$210.03 - 74.6 = \square$

9 Stephen's brother has stacked two building blocks, as shown below.



What is the total volume of the building blocks?

 cm³

10 Enter the product.

$5 \times 10^3 = \square$

11 Which expression is equal to 567.083?

A. $(5 \times 100) + (6 \times 10) + (7 \times 1) + (8 \times 100) + (3 \times 1000)$

B. $(5 \times 100) + (6 \times 10) + (7 \times 1) + \left(8 \times \frac{1}{10}\right) + \left(3 \times \frac{1}{100}\right)$

C. $(5 \times 100) + (6 \times 10) + (7 \times 1) + \left(8 \times \frac{1}{100}\right) + \left(3 \times \frac{1}{1000}\right)$

D. $(5 \times 100,000) + (6 \times 10,000) + (7 \times 1000) + (8 \times 10) + (3 \times 1)$

Directions: Answer the following question(s).

- 12 At the beginning of the year, students in Mrs. Johnson's class took a survey. It was discovered that $\frac{1}{3}$ of the whole class was born in a summer month. Of those born in the summer, $\frac{2}{5}$ of them were born in July. What fraction of the entire class was born in July?

A. $\frac{1}{15}$

B. $\frac{2}{15}$

C. $\frac{2}{5}$

D. $\frac{5}{6}$

- 13 Enter the product of 435×29 .

- 14 There are 60 minutes in one hour. There are 24 hours in one day. How many minutes are there in one day?

minutes

15

- 16 Enter the quotient.

$38 \overline{)2242}$

- 17 Compute the sum.

$64.9 + 5.63 =$

- A. 1.212
B. 69.53
C. 70.53
D. 1212

Directions: Answer the following question(s).

18
$$\begin{array}{r} 13.2 \\ \times .07 \\ \hline \end{array}$$

- A. 92.4
- B. 9.204
- C. 0.924
- D. 0.0924

19

20 **Solve:**

$$73 - 4.65$$

- A. 68.35
- B. 68.45
- C. 69.65
- D. 72.35

21 **Round 26.084 to the nearest tenth.**

- A. 26
- B. 26.01
- C. 26.1
- D. 30

22

23 **Solve.**

$$2.88 \div 0.2 =$$

- A. .144
- B. 1.44
- C. 14.4
- D. 144

Directions: Answer the following question(s).

24

Lauren has 6 cups of hot chocolate to serve to her friends. If each serving is $\frac{1}{2}$ of a cup, how many servings does Lauren have?

- A. 12 servings
- B. 3 servings
- C. $\frac{1}{3}$ servings
- D. $\frac{1}{12}$ servings

25

What positive value for b makes the statement true?

$8 \times x$ is greater than 0 but less than 8.

- A. $\frac{1}{8}$
- B. $1\frac{3}{8}$
- C. $\frac{16}{8}$
- D. 8

26

Find the sum of the fractions below.

$$1\frac{2}{3} + 2\frac{3}{9} =$$

- A. 3
- B. $3\frac{5}{12}$
- C. $3\frac{4}{9}$
- D. 4

Directions: Answer the following question(s).

27 Which value for f will make the statement true?

$6 \times f$ is greater than 6

Select *all* that are correct.

A. $\frac{1}{2}$

B. 1

C. $1\frac{1}{4}$

D. $1\frac{1}{2}$

28 Which expression is equal to $\frac{5}{8}$?

A. 5×8

B. 8×5

C. $5 \div 8$

D. $8 \div 5$

29 Enter the number that makes the equation true.

$$2\frac{7}{8} + 1\frac{4}{5} = 2\frac{\boxed{}}{40} + 1\frac{32}{40}$$

30 There are 4 friends selling raffle tickets. They started with 125 raffle tickets and have sold 89 so far. They plan to split the raffle tickets that are still left so that each friend will take an equal amount.

Which expression can the friends use to figure out how many raffle tickets each friend should take?

A. $(125 - 89) \div 4$

B. $(125 - 89) - 4$

C. $(125 + 89) \times 4$

D. $(125 \times 89) \div 4$

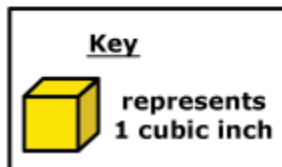
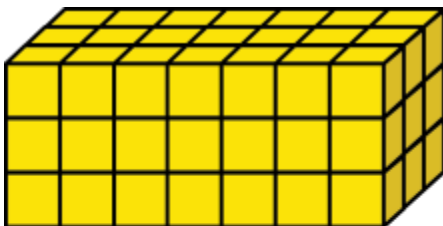
Directions: Answer the following question(s).

- 31 Zach solved a multiplication problem using two different methods. He made a mistake in either Method A or Method B.

Method A	Method B																
$2\frac{1}{2} \times 3\frac{3}{4}$ $\begin{array}{c} + \\ \downarrow \\ 2\frac{1}{2} = \frac{5}{2} \\ + \end{array}$ $\begin{array}{c} + \\ \downarrow \\ 3\frac{3}{4} = \frac{10}{4} \\ + \end{array}$ $\frac{5}{2} \times \frac{10}{4}$ $\frac{5 \times 10}{2 \times 4} = \frac{50}{8}$ $\frac{50}{8} \text{ or } 6\frac{1}{4}$	$2\frac{1}{2} \times 3\frac{3}{4}$ Area Model <table><tr><td></td><td>2</td><td>+</td><td>$\frac{1}{2}$</td></tr><tr><td>3</td><td>6</td><td></td><td>$\frac{3}{2}$</td></tr><tr><td>+</td><td></td><td></td><td></td></tr><tr><td>$\frac{3}{4}$</td><td>$\frac{6}{4}$</td><td></td><td>$\frac{3}{8}$</td></tr></table> Rectangle Sections $\begin{array}{r} 3 \\ 6 \\ + \frac{3}{2} \rightarrow \frac{12}{8} \\ + \frac{6}{4} \rightarrow \frac{12}{8} \\ + \frac{3}{8} \rightarrow \frac{3}{8} \\ \hline 9\frac{3}{8} \end{array}$		2	+	$\frac{1}{2}$	3	6		$\frac{3}{2}$	+				$\frac{3}{4}$	$\frac{6}{4}$		$\frac{3}{8}$
	2	+	$\frac{1}{2}$														
3	6		$\frac{3}{2}$														
+																	
$\frac{3}{4}$	$\frac{6}{4}$		$\frac{3}{8}$														

Identify the method where Zach made a mistake and explain what he should do to correct it.

- 32 The rectangular prism shown is solid.

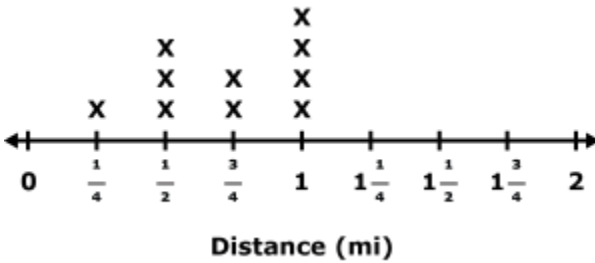


Enter the volume, in cubic inches, of the rectangular prism.

cubic inches

Directions: Answer the following question(s).

- 33 The line plot shows the distance, in miles, that students walked on Friday.



How many students walked over $\frac{1}{2}$ of a mile?

students

34

- 35 Meyer Elementary School sells popcorn each Friday for \$0.50 a bag. They are selling the popcorn to raise money for basketball uniforms. Last month they sold 576 bags of popcorn. The uniforms will cost \$500.

Part A:

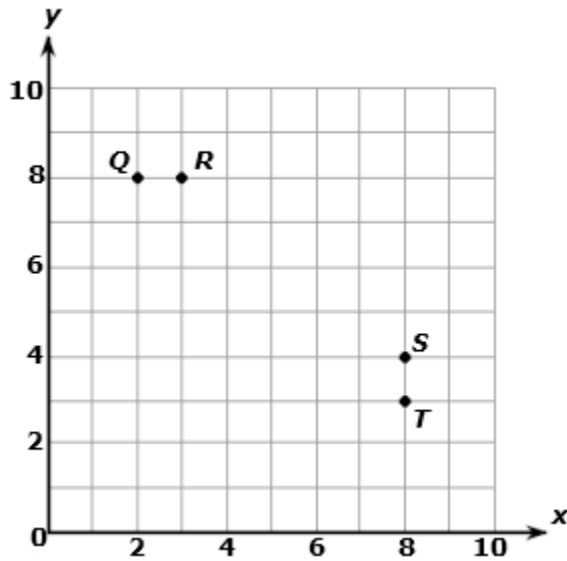
Write an expression to find how much more money Meyer Elementary School needs to purchase the uniforms.

Part B:

Using the expression you wrote in Part A, how much more money does Meyer Elementary School need to purchase the uniforms?

Directions: Answer the following question(s).

36 Which point represents (8, 3) on the graph below?



- A. point Q
- B. point R
- C. point S
- D. point T

37 Convert.

40 meters = _____ millimeters

- A. 400,000
- B. 40,000
- C. 4000
- D. 0.04

38 Sonya is 3 feet 7 inches tall. What is Sonya's height in inches?

- A. 37 inches
- B. 43 inches
- C. 52 inches
- D. 87 inches

39

Directions: Answer the following question(s).

40 Sarah bought 2 boxes of large paper clips with 100 paper clips in each box. Tammy bought 3 boxes of colored paper clips with 50 paper clips in each box. Which expression shows how many more paper clips Sarah bought than Tammy?

- A. $(2 \times 100) - (3 \times 50)$
- B. $(3 \times 100) - (2 \times 50)$
- C. $(2 + 100) - (3 + 50)$
- D. $(3 + 100) - (2 + 50)$