

Use the information provided to answer Part A and Part B for question 10.

Diana works at a clothing store. She sold $\frac{1}{5}$ of the total number of green shirts on Monday and $\frac{3}{12}$ of the total number of green shirts on Tuesday.

10. Part A

What fraction of green shirts did Diana sell on Monday and Tuesday?

- A. $\frac{8}{13}$
- B. $\frac{4}{17}$
- C. $\frac{5}{36}$
- D. $\frac{27}{60}$

Part B

Diana sold $\frac{2}{15}$ of the total number of green shirts on Wednesday. What is the difference in the fraction of the total number of green shirts that were sold on Tuesday and Wednesday?

- A. $\frac{7}{60}$
- B. $\frac{5}{27}$
- C. $\frac{1}{3}$
- D. $\frac{1}{12}$

12. Which of these are equal to 83.041?

Select the **two** correct answers.

A. eighty-three and forty-one tenths

B. $8 \times 10 + 3 \times 1 + 4 \times \frac{1}{10} + 1 \times \frac{1}{100}$

C. eighty-three and forty-one hundredths

D. $8 \times 10 + 3 \times 1 + 4 \times \frac{1}{100} + 1 \times \frac{1}{1,000}$

E. eighty-three and forty-one thousandths



13. Len walks $\frac{3}{10}$ mile in the morning to school. He walks $\frac{2}{5}$ mile in the afternoon to a friend's house.

Len says that he walks a total of $\frac{5}{15}$ mile in the morning and afternoon.

Which **two** statements are true?

- A. Since $\frac{3}{10}$ plus $\frac{2}{5}$ is $\frac{5}{15}$, the total of $\frac{5}{15}$ is reasonable.
- B. Since $\frac{5}{15}$ is less than $\frac{2}{5}$, the total of $\frac{5}{15}$ is not reasonable.
- C. The fractions $\frac{5}{15}$, $\frac{3}{10}$, and $\frac{2}{5}$ are all less than $\frac{1}{2}$, so the total of $\frac{5}{15}$ is reasonable.
- D. The fraction $\frac{5}{15}$ is $\frac{1}{3}$, and $\frac{1}{3}$ is greater than $\frac{3}{10}$. Since $\frac{5}{15}$ is greater than one of the addends, the total of $\frac{5}{15}$ is reasonable.
- E. The fractions $\frac{3}{10}$ and $\frac{2}{5}$ are each greater than $\frac{1}{4}$, so the total must be greater than $\frac{1}{2}$. The fraction $\frac{5}{15}$ is less than $\frac{1}{2}$, so the total of $\frac{5}{15}$ is not reasonable.

Use the information provided to answer Part A and Part B for question 14.

There are two tanks at the aquarium, Tank A and Tank B. Each tank has two sections.

14. Part A

The volume of one section of Tank A is 24 cubic feet. The volume of the other section of Tank A is 96 cubic feet.

What is the total volume, in cubic feet, of Tank A?

- A. 4
- B. 72
- C. 120
- D. 2,304

Part B

Tank B has the same volume as Tank A.

The volume of one section of Tank B is 45 cubic feet. What is the volume, in cubic feet, of the other section of Tank B?

Enter your answer in the box.

15. Which expression is equal to $\frac{7}{8}$?

- A. $8 - 7$
- B. 7×8
- C. $\frac{8}{7}$
- D. $7 \div 8$

29. Which explanation about figures is correct?

- A.** All rhombuses are parallelograms. Parallelograms have 2 pairs of parallel sides.
Therefore, all rhombuses have 2 pairs of parallel sides.
- B.** All rhombuses are parallelograms. Parallelograms have exactly 1 pair of parallel sides.
Therefore, all rhombuses have exactly 1 pair of parallel sides.
- C.** Only some rhombuses are parallelograms. Parallelograms have 2 pairs of parallel sides.
Therefore, only some rhombuses have 2 pairs of parallel sides.
- D.** Only some rhombuses are parallelograms. Parallelograms have exactly 1 pair of parallel sides.
Therefore, only some rhombuses have exactly 1 pair of parallel sides.

24. Enter your answer in the box.

$$1,534 \div 26 =$$

19. Part A

Select the **two** equations that are correct when the number 20 is entered in the box.

A. $\square \times 85 = 1,700$

B. $\square \div 4 = 50$

C. $1,500 \div \square = 75$

D. $120 \times 6 = \square$

E. $\square \times 50 = 100$

Part B

Select the **two** equations that are correct when the number 200 is entered in the box.

A. $\square \times 85 = 17,000$

B. $\square \div 40 = 50$

C. $15,000 \div \square = 75$

D. $1,200 \times 6 = \square$

E. $\square \times 50 = 1,000$

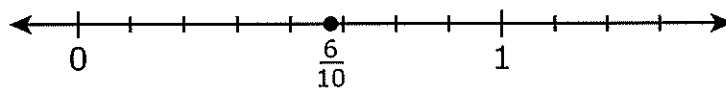
Mathematics

26. A cereal box has a height of 32 centimeters. It has a base with an area of 160 square centimeters.

What is the volume, in cubic centimeters, of the cereal box?

Enter your answer in the box.

27. On Saturday, Craig rode his bike $\frac{5}{8}$ of a mile. On Sunday, he rode his bike $\frac{1}{2}$ of a mile. Craig added $\frac{5}{8}$ and $\frac{1}{2}$ to find the total distance, in miles, he rode his bike on the two days. Craig said $\frac{5}{8} + \frac{1}{2} = \frac{6}{10}$ and plotted $\frac{6}{10}$ on this number line.



- Explain why Craig's answer is not reasonable.
- Find the total distance, in miles, Craig rode on his bike on Saturday and Sunday.
- Explain how to use the number line to show your answer is correct.

Enter your answer and explanations in the space provided.

22. Jim uses ribbon to make bookmarks. Jim has 9 feet of ribbon. He uses $\frac{1}{3}$ foot of ribbon to make each bookmark.

What is the total number of bookmarks Jim makes with all 9 feet of ribbon?

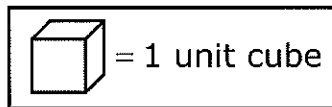
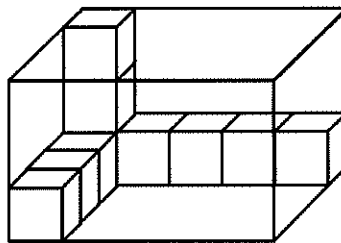
Enter your answer in the box.

Mathematics

30. Which **two** statements about rounding decimals are correct?
- A. The number 5.066 rounded to the nearest hundredth is 5.07.
 - B. The number 5.074 rounded to the nearest hundredth is 5.08.
 - C. The number 5.117 rounded to the nearest hundredth is 5.10.
 - D. The number 5.108 rounded to the nearest hundredth is 5.11.
 - E. The number 5.025 rounded to the nearest hundredth is 5.02.

4. Which statement correctly compares two values?
- A. The value of the 6 in 26.495 is $\frac{1}{10}$ the value of the 6 in 17.64.
 - B. The value of the 6 in 26.495 is 10 times the value of the 6 in 17.64.
 - C. The value of the 6 in 26.495 is $\frac{1}{100}$ the value of the 6 in 17.64.
 - D. The value of the 6 in 26.495 is 100 times the value of the 6 in 17.64.

5. What is the volume of the rectangular prism in cubic units?



Enter your answer in the box.

2. An expression is shown.

$$\frac{5}{6} + \frac{3}{12}$$

Which expressions have like denominators that could be used as a next step to add the two fractions?

Select the **two** correct answers.

A. $\frac{5}{6} + \frac{1}{4}$

B. $\frac{5}{6} + \frac{3}{6}$

C. $\frac{10}{12} + \frac{3}{12}$

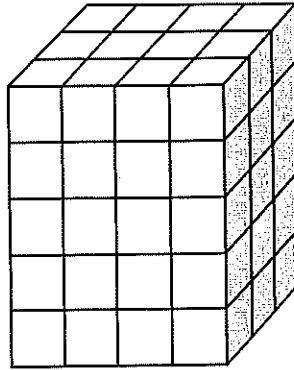
D. $\frac{5}{12} + \frac{6}{12}$

E. $\frac{5}{12} + \frac{6}{24}$

F. $\frac{20}{24} + \frac{6}{24}$

Mathematics

6. In this right rectangular prism, each small cube measures 1 unit on each side.



- What is the volume of the prism?
- Explain how you found the volume. You may show your work in your explanation.
- What would be the dimensions of a new right rectangular prism that has 20 fewer unit cubes than the original prism?
- Explain how you determined the dimensions of the new right rectangular prism.

Enter your answers and your explanations in the space provided.

8. Which figure is always a rectangle?
- A. square
 - B. rhombus
 - C. quadrilateral
 - D. parallelogram
9. Which expression matches the statement, "the sum of 2 and 4 subtracted from 9"?
- A. $2 + 9 - 4$
 - B. $9 - 2 + 4$
 - C. $9 - (2 + 4)$
 - D. $(2 + 4) - 9$