

Name:	
Date:	

Which factors of 18 are prime factors?

- A 1 and 3
- B 2 and 9
- 3 and 6
- 2 and 3

2

#### Select the correct answer.

Complete the pattern.

160, 175, 250, 310, 385, 400, 475, 535, \_\_\_\_\_

- A 550
- B 595
- 610
- 635

3

#### Select the correct answer.

What is the value of  $6 \times 22 - 12 \div 4$ ?

- A 15
- **B** 30
- 119
- 129

### Select the correct answer.

A green ribbon is  $1\frac{2}{5}$  m long.

A red ribbon is twice as long as the green ribbon.

What is the total length of the two ribbons?

- $\frac{1}{6}$  m

- $5\frac{3}{5}$  m

# 5

#### Select the correct answer.

0.487 × \_\_\_\_\_ = 487

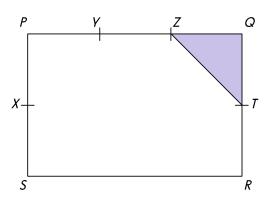
- 10
- 100
- 1,000
- 10,000

# 6

### Select the correct answer.

PQRS is a rectangle. PQ is 18 centimeters long. PX = PY = YZ = ZQ. Find the area of the shaded part.

- 6 cm<sup>2</sup>
- $18 \text{ cm}^2$
- 108 cm<sup>2</sup>
- $216 \text{ cm}^2$



Container X had 3 times as much water as Container Y at first. After  $\frac{1}{5}$  of the water in Container X was poured into Container Y, there were 2.4 liters more water in Container X than in Container Y. What was the amount of water in Container X at first?

- 7.2 L
- 9.0 L
- 9.6 L
- 12.0 L

#### Select the correct answer.

A box has 360 apples.  $\frac{1}{10}$  of the apples are rotten. How many good apples are there?

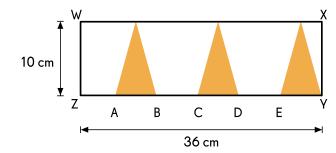
- 10
- 36
- 324
- 350

# 9

#### Select the correct answer.

In the diagram, WXYZ is a rectangle. ZA = AB = BC = CD = DE = EY. What is the area of the figure that is **not** shaded?

- $90 \text{ cm}^2$
- B 180 cm<sup>2</sup>
- 240 cm<sup>2</sup>
- $270 \text{ cm}^2$





On a street, 16 trees are planted. The trees are equal distance apart. The first tree is 86 meters 70 centimeters away from the last tree. How far apart are the first tree and the fifth tree?

- A 5 m 78 cm
- B 21 m 68 cm
- 23 m 12 cm
- D 28 m 90 cm

### 11

#### Select the correct answer.

The average mass of 4 girls is 50 kilograms. The average mass of 3 of the girls is 52 kilograms. What is the mass of the fourth girl?

- A 44 kg
- B 50 kg
- **C** 156 kg
- D 200 kg

## 12

### Select the correct answer.

 $\frac{1}{8}$  of the sum of two numbers is 10. One number is 4.

What is the other number?

- A 80
- B 76
- **G** 22
- **D** 18



Two sisters had a total of \$45.80. After their father gave \$12.40 to the older sister, she had 5 times as much money as the younger sister. How much money did the older sister have at first?

- A \$9.70
- B \$16.70
- \$36.10
- \$58.20

## 14

#### Select the correct answer.

A tank is 62.5% full of water.

After 820 milliliters of water are poured out, the tank is 12.5% filled with water. What is the capacity of the tank?

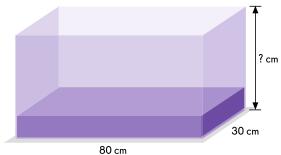
- A 1.64 L
- B 1.312 L
- 0.82 L
- 0.205 L

# 15

#### Select the correct answer.

A rectangular tank is  $\frac{2}{5}$  filled with water. There are 57.6 liters of water in the tank. What is the height of the tank?

- A 18 cm
- B 24 cm
- 36 cm
- **6**0 cm





There are 1,000 potatoes in a crate.  $\frac{1}{8}$  of them are rotten and the rest are good.

How many more good potatoes than rotten potatoes are there in the crate?

- A 125
- **B** 250
- 750
- **D** 875



#### Select the correct answer.

There are 4,725 marbles in a box. The ratio of the number of red marbles to the number of blue marbles is 3:1. The ratio of the number of green marbles to the number of blue marbles is 5:1. How many red marbles are there?

- A 525
- B 1,050
- 1,575
- 2,625



#### Select the correct answer.

Trina bought 5 dresses. The first dress cost \$65.20 and the average of the remaining dresses was  $\frac{3}{4}$  the cost of the first dress. How much did Trina pay for the dresses?

- A \$48.90
- B \$195.60
- \$244.50
- \$260.80

Select the correct answer.

There are 88 more tigers than cheetahs in a Nature Reserve, and  $\frac{5}{6}$  of the number of cheetahs are equal to  $\frac{4}{7}$  of the number of tigers. How many tigers are there in the Nature Reserve?

- A 11
- B 192
- 280
- D 472

20

Select the correct answer.

There are 360 stamps in an album. 40% of the stamps are Mexico stamps and  $\frac{1}{4}$  are Singapore stamps. Find the difference in the number of Mexico stamps and Singapore stamps.

- A 54
- B 90
- **G** 144
- D 306

21

Fill in the blank.

How many one thirds ( $\frac{1}{3}$ ) are there in 7 wholes?

7 × 3 =

Fill in the blank.

What is the value of  $20,700 \div 9,000$ ?

23

Fill in the blanks.

Evaluate  $5\frac{1}{2} - 2\frac{3}{4} + 1\frac{1}{6}$ .



24

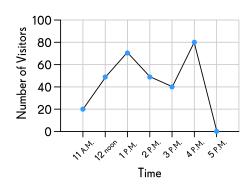
Fill in the blank.

Find the value of  $65 - 3 \times [72 - (36 + 20)]$ .

25

Fill in the blank.

The line graph shows the number of visitors at a museum in one day.



At what time was the number of visitors twice as many as the number of visitors at 3:00 P.M.?

The number of visitors at : A.M. / P.M. was twice as many as the number of visitors at 3:00 P.M.



### Fill in the blanks.

The height of a triangle is  $\frac{3}{8}$  feet. Its base is  $\frac{4}{9}$  feet. Find the area of the triangle.



### 27

### Fill in the blanks.

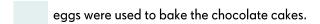
Lara bought  $\frac{3}{5}$  kg of dog food. After 6 days, there was  $\frac{1}{3}$  kg of dog food left. How much dog food did her dog eat?



#### 28

#### Fill in the blank.

Myra has 160 eggs. She uses  $\frac{1}{4}$  of them to bake cakes.  $\frac{1}{5}$  of the cakes she baked were chocolate cakes. How many eggs were used to bake the chocolate cakes?



# 29

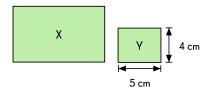
#### Fill in the blank.

A bag has purple cubes and pink cubes. 0.3 of the cubes are purple, which are 42 cubes. How many cubes are there in all?

There are cubes in all.

#### Fill in the blank.

Rectangle X is an enlargement of Rectangle Y. The ratio of the area of Rectangle X to the area of RectangleY is 5:2. Rectangle Y measures 5 centimeters by 4 centimeters. What is the area of Rectangle X?'



The area of Rectangle X is cm<sup>2</sup>.



#### Fill in the blank.

Find the area of the shaded region in the figure.

30 cm 15 cm

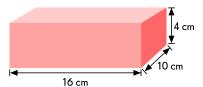
The area of the shaded region is cm<sup>2</sup>.



#### Fill in the blank.

Find the volume of the object.

The volume of the object is cm<sup>3</sup>.

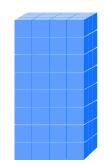


### 33

#### Fill in the blank.

The rectangular prism is made up of identical cubes. The volume of the rectangular prism is 6,144 cubic centimeters. Find the length of each cube.

The length of each cube is cm.

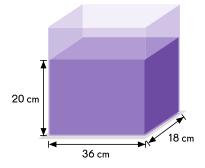




#### Fill in the blank.

Find the volume of water in the rectangular tank. (Hint:  $1L = 1,000 \text{ cm}^3$ )

The volume of water in the rectangular tank is



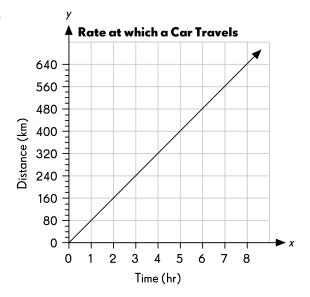
L.



#### Fill in the blank.

The graph shows the distance at which a car travels over 8 hours. Use the graph to find the distance the car travelled in 5 hours.

The car travelled km in 5 hours.

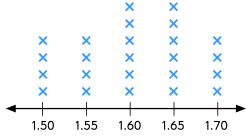


#### Fill in the blank.

The line plot shows the height of some students.

How many students have a height of at least 1.60 meters?

students have a height of at least 1.60 meters.



X

X

**Height of Student (meters)** 

**37** 

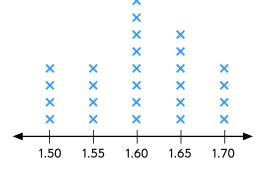
#### Fill in the blank.

The line plot shows the height of some students.

How many students have a height of at least 1.60 meters?

The most common height of the students is

m.



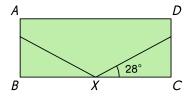
**Height of Student (meters)** 



#### Fill in the blank.

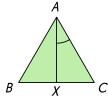
In the figure, ABCD is a rectangle and DX = AX. Find the measure of  $\angle AXD$ .

m∠AXD =



### Fill in the blank.

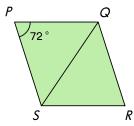
ABC is an equilateral triangle and BX = CX. BC is a line segment. Find the measure of  $\angle CAX$ .



### 40

### Fill in the blank.

*PQRS* is a rhombus. Find the measure of  $\angle QSR$ .



- 1. D
- 2. C
- 3. D
- 4. C
- 5. C
- 6. B
- 7. B
- 8. C
- 9. D
- 10. C
- 11. A
- 12. B
- 13. C
- 14. A
- 15. D
- 16. C
- 17. C
- 18. D
- 19. C
- 20. A
- 21. 21
- 22. 2.3

$$5\frac{1}{2} - 2\frac{3}{4} + 1\frac{1}{6} = 5\frac{6}{12} - 2\frac{9}{12} + 1\frac{2}{12}$$
$$= 4\frac{18}{12} - 2\frac{9}{12} + 1\frac{2}{12}$$
$$= 3\frac{11}{12}$$

23.

$$65-3 \times [72-(36+20)]$$
  
=  $65-3 \times (72-56)$   
=  $65-3 \times 16$   
=  $65-48$   
=  $17$ 

24.

25. 4 PM

$$\frac{1}{2} \times \frac{3}{8} \times \frac{4}{9} = \frac{1}{12} \text{ ft}^2$$

$$\frac{3}{5} - \frac{1}{3} = \frac{9}{15} - \frac{5}{15}$$
$$= \frac{4}{15}$$

Her dog ate  $\frac{4}{15}$  kg of dog food.

27.

$$\frac{1}{4}\times\frac{1}{5}=\frac{1}{20}$$

$$\frac{1}{20}$$
 × 160 = 8

8 eggs were used to bake the chocolate cakes.

28.

$$\frac{42}{0.3}$$
 = 140

There are 140 cubes in all.

29.

Area of Rectangle Y =  $5 \times 4 = 20 \text{ cm}^2$ 

2 units  $\rightarrow$  20 cm<sup>2</sup>

5 units 
$$\rightarrow \frac{5 \times 20}{2}$$
  
= 50 cm<sup>2</sup>

The area of Rectangle X is 50 cm2.

30.

$$\frac{1}{2}$$
 × 30 × (30 – 15) = 225 cm<sup>2</sup>

The area of the shaded region is  $225\ cm^2$ .

31.

32. 640

Volume of each cube = 
$$\frac{6144}{96}$$

$$64 \text{ cm}^3 = 4 \times 4 \times 4$$

Length = 4 cm

The length of each cube is 4 cm.

33.

$$36 \times 18 \times 20 = 12,960 \text{ cm}^3$$
  
=  $\frac{12960}{1000} \text{ L}$   
= 12.96L

The volume of water in the rectangular tank is 12.96L.

34.

$$180^{\circ} - (28^{\circ} \times 2) = 124^{\circ}$$
  
m $\angle AXD = 124^{\circ}$ 

38.

$$180^{\circ} - 90^{\circ} - 60^{\circ} = 30^{\circ}$$
  
m\(\angle CAX = 30^{\circ}\)

39.

$$(180^{\circ} - 72^{\circ}) \div 2 = 54^{\circ}$$
  
m $\angle QSR = 54^{\circ}$ 

40.