

Year 2 Nourishing Newtons SAMPLE Mathematics Questions

Addition and Subtraction

Jake has 14 marbles and Hector has 5 more marbles than Jake. How many marbles do Jake and Hector have altogether?

- A. 19 marbles
- B. 23 marbles
- C. 24 marbles
- D. 32 marbles
- E. 33 marbles

Ans : E

Given:

Jake = 14 marbles

Hector = 5 more than Jake = $14 + 5 = 19$ Marbles

Solution:

Jake + Hector = $14 + 19 = 33$ marbles

Unit Conversion

Mary needs 3 kilograms of beef for her party tomorrow. However, when she was at the supermarket, the measuring scale was broken and only showed mass in grams.

How many grams of beef does she need to buy?

- A. 30 grams
- B. 60 grams
- C. 300 grams
- D. 600 grams
- E. 3 000 grams

Ans: E

Given:

M = 3 kg

grams = ?

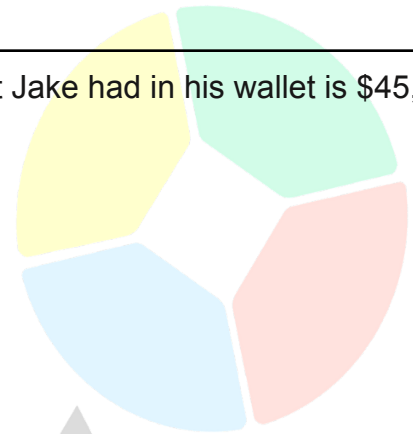
Solution:

$3 \text{ kg} \times 1000 \text{ g } 1 \text{ kg} = 3000 \text{ g}$

Money Problems

Jake only had five-dollar bills in his wallet. If the total amount that Jake had in his wallet is \$45, how many five-dollar bills did he have?

- A. Five
- B. Seven
- C. Eight
- D. Nine
- E. Ten



Ans : D

Given:

Total = \$45

Jake only has five dollar bill

Solution:

$45/5 = 9$ or **Nine**

Time, Date, and Direction

Batman and Superman have a meeting three days from today. If today is Saturday, what day of the week does their meeting fall?

- A. Monday
- B. Tuesday
- C. Wednesday
- D. Saturday
- E. Sunday

Ans: B

Given:

3 days from today

Today = Saturday

Solution:

Saturday + 3 days = **Tuesday**

Speed, Distance and Time

The White Rabbit can hop a distance of 30 metres in 15 minutes. At this rate, how many metres can the White Rabbit hop in one hour?

- A. 60 metres
- B. 90 metres
- C. 120 metres
- D. 150 metres
- E. 300 metres

Ans: C

Given:

30 metres in 15 mins

Solution:

30 metres = 15 mins

2 metres = 1 min

1 hours = 60 mins

2 metres (60 mins) = **120 metres**

Number Pattern and Sequences

A farmer planted several rows of corn. He planted 8 corn plants in the first row, 12 corn plants in the second row, 16 corn plants in the third row, 20 corn plants in the fourth row, and 24 corn plants in the fifth row.

If this pattern continues, how many corn plants did the farmer plant in the sixth row?

- A. 25 corn plants
- B. 26 corn plants
- C. 28 corn plants
- D. 30 corn plants
- E. 32 corn plants

Ans: C

Given:

1st = 8

2nd = 12

3rd = 16

4th = 20

5th = 24



Solution:

Pattern is increasing by 4

6th = $24 + 4 = 28$ corn plants

Ratio and Proportions

There is 1 boy for every 2 girls in Sheldon's class. If there were 5 boys in Sheldon's class, how many girls are there?

- A. 2 girls
- B. 3 girls
- C. 5 girls
- D. 6 girls
- E. 10 girls

Ans: E

Given:

B:G = 1:2

Solution:

$\frac{1}{2} = \frac{5}{G}$

G = 10 girls

Perimeter and Area

Dexter built a new countertop table in his laboratory. The countertop table was 6 metres long and 4 metres wide.

What was the perimeter of the countertop table?

- A. 8 metres
- B. 10 metres
- C. 12 metres
- D. 20 metres
- E. 24 metres



Ans: D

Given:

The countertop table was 6 metres long and 4 metres wide

Solution:

$$\text{Perimeter} = 2(\text{Length}) + 2(\text{Width})$$

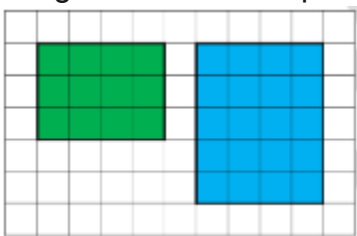
$$\text{Perimeter} = 2(6) + 2(4)$$

$$\text{Perimeter} = 12 + 8$$

$$\text{Perimeter} = \mathbf{20 \text{ meters}}$$

Line of Symmetry, Grid, Folding, and Nets

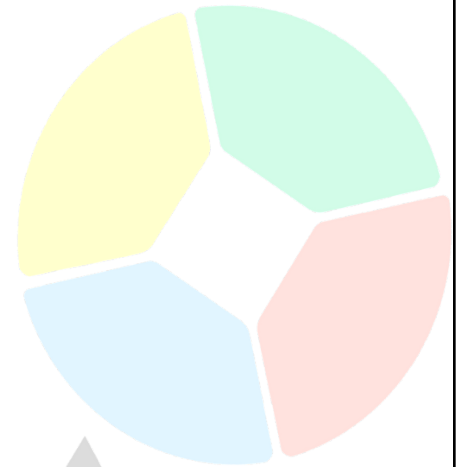
The grid below is composed of identical squares.



If the green rectangle has a perimeter of 14 centimetres, what is the perimeter of the blue rectangle?

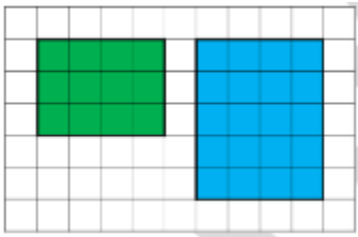
- A. 15 centimetres
- B. 16 centimetres

- C. 18 centimetres
- D. 24 centimetres
- E. 25 centimetres



Ans: C

Given:



Solution:

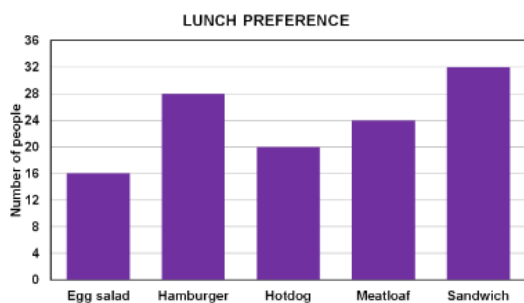
Green Perimeter = 14 cm

Perimeter = 14 small square grid
 $14/14 = \text{Size of small square grid}$
 Size of small square grid = 1

Blue perimeter = 18 small square grid
 Blue perimeter = $18(1) = 18 \text{ cm}$

Data and Statistics

The bar graph below shows the result of a survey asking people about their lunch preferences.



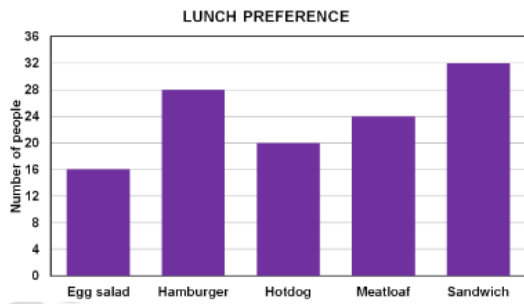
How many people surveyed preferred egg salad for their lunch?

- A. 16 people
- B. 20 people
- C. 24 people
- D. 28 people
- E. 32 people



Ans: A

Given



Solution



Therefore, the answer is **16 people**.