Percentages – Missing Values

1a. The children disagree about how to find 20% of 60.

Olivia

I've found that 18 = 30%, so 20% must be 12.

I've found that 28 = 40%, so 20% must be 7.

Lucas

Who is correct? Explain why.

D

R

1b. The children disagree about how to find 30% of 400.

Fionn

I've found that 80 = 20%, so 30% must be 240.

I've found that 240 = 60%, so 30% must be 120.

Abdol

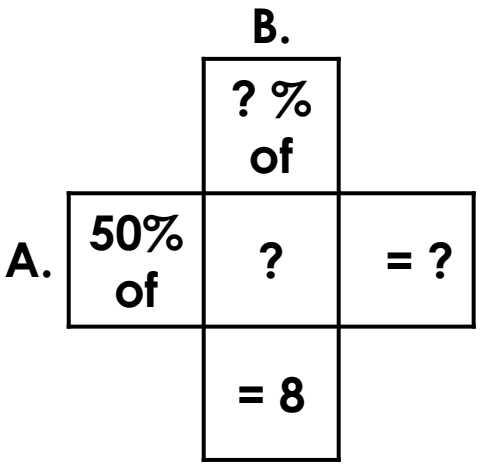
Who is correct? Explain why.

D

R

2a. What could the missing values be?

Find 2 possible solutions.

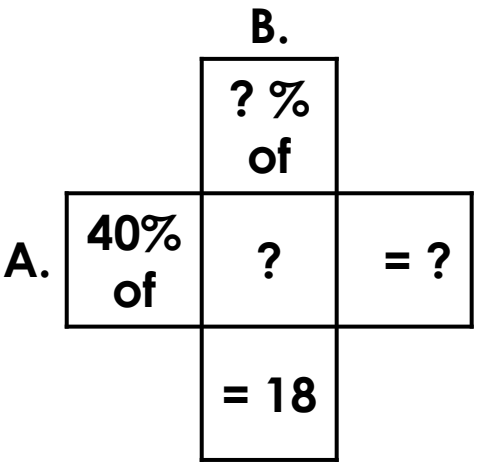


D

PS

2b. What could the missing values be?

Find 2 possible solutions.



D

PS

3a. There are 240 sweets in a jar.

20% of the sweets are orange; the rest are yellow and green.

The percentages of yellow and green sweets are multiples of 10.

Give 2 possible combinations of yellow and green sweets.

Write your answers as percentages and amounts.

D

PS

3b. There are 300 cupcakes altogether at a bake sale.

30% of the cupcakes are red; the rest are lilac and pink.

The percentages of lilac and pink cupcakes are multiples of 10.

Give 2 possible combinations of lilac and pink cupcakes.

Write your answers as percentages and amounts.

D

PS

Percentages – Missing Values

4a. The children disagree about how to find 35% of 500.

Leon

I've found that 150 = 30%, so 35% must be 155.

I've found that 50 = 10%, so 35% must be 175.

Marcus

Who is correct? Explain why.

E

R

4b. The children disagree about how to find 85% of 300.

Annie

I've found that 240 = 80%, so 85% must be 255.

I've found that 60 = 20%, so 85% must be 270.

Stephen

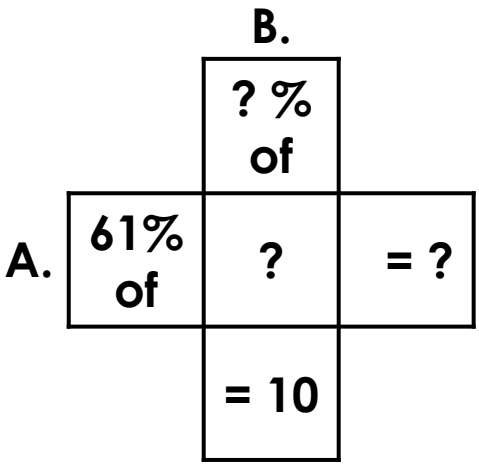
Who is correct? Explain why.

E

R

5a. What could the missing values be?

Find 2 possible solutions.

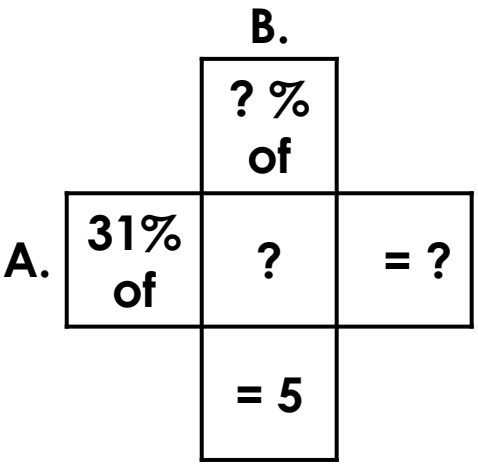


E

PS

5b. What could the missing values be?

Find 2 possible solutions.



E

PS

6a. A garden centre has a variety of plants; there are 200 plants altogether.

85% of the plants are roses.

60% of the roses are red, the rest are yellow.

How many red roses are there? How many yellow roses are there?

E

PS

6b. A pizzeria sells a variety of pizzas; There are 400 pizzas altogether.

65% of them are cheese pizzas.

35% of the cheese pizzas have stuffed crust, the rest do not.

How many cheese pizzas have stuffed crust? How many cheese pizzas do not?

E

PS

Percentages – Missing Values

7a. The children disagree about how to find 33% of 140.

Tia

I've found that 14 = 10%, so 33% must be 56.

I've found that 15.4 = 11%, so 33% must be 46.2.

Joe

Who is correct? Explain why.

GD

R

7b. The children disagree about how to find 87.5% of 300.

Leida

I've found that 37.5 = 12.5%, so 87.5% must be 262.5.

I've found that 15 = 5%, so 87.5% must be 255.

Donnie

Who is correct? Explain why.

GD

R

8a. What could the missing values be?

Find 2 possible solutions.

	B. ? % of	
A. 62.5 % of	?	= ?
	= 12	

GD

PS

8b. What could the missing values be?

Find 2 possible solutions.

	B. ? % of	
A. 47.5 % of	?	= ?
	= 5	

GD

PS

9a. A school have planned a trip for Year 7. There are 200 children in Year 7.

92% of the children are going.

75% of the children on the trip take part in an obstacle course; 50% of those children complete the course.

How many children went on the course?
How many completed it?
What percentage of children in Year 7 completed the obstacle course?

GD

PS

9b. A gardener has grown some plants. There are 250 plants altogether.

80% of the plants are edible.

37% of the edible plants are fruits; the rest are vegetables.

How many of the edible plants are fruits?
How many of the edible plants are vegetables?
What percentage of all the plants in his garden are vegetables?

GD

PS