

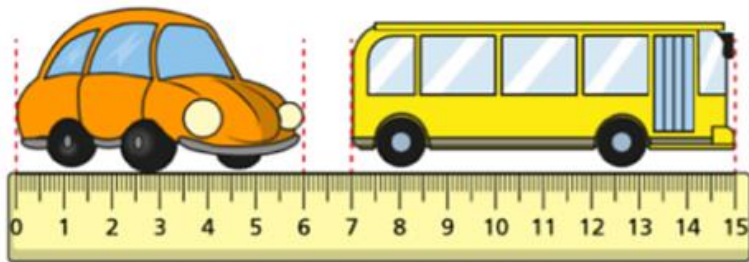
Friday 3rd July

It is puzzle challenge day!

Remember, the first 2 puzzles should warm you up, then see how many of the others you can solve!

Challenge 1

Here is a toy car and bus.



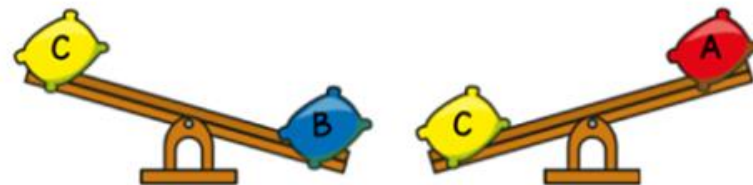
By how many cm is the bus longer than the car?

Challenge 2

Here are 3 beanbags.



They are placed on a seesaw.



Which beanbag is the heaviest?

Challenge 3

Amir is dividing a 2-digit number by 3.

His answer is a whole number.

$$\boxed{2}\boxed{} \div \boxed{3}$$

What could the missing digit be?

Challenge 4

Lewis makes a repeating pattern with some shapes.

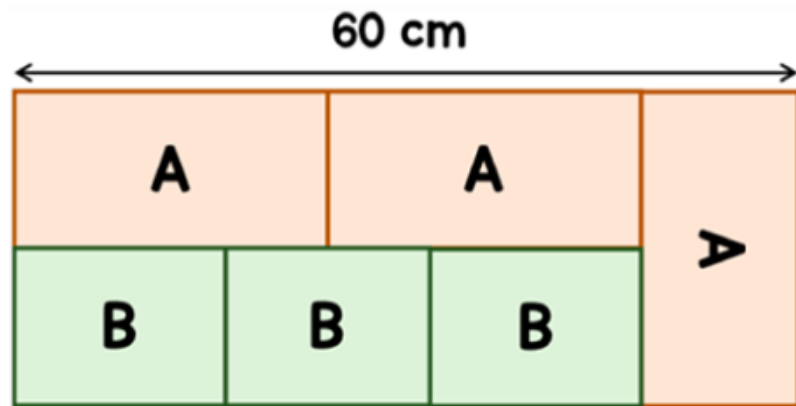


Lewis repeats the pattern.

What is the shape in the **50th** position?

Challenge 5

A large rectangle is made up of smaller rectangles, labelled A and B.

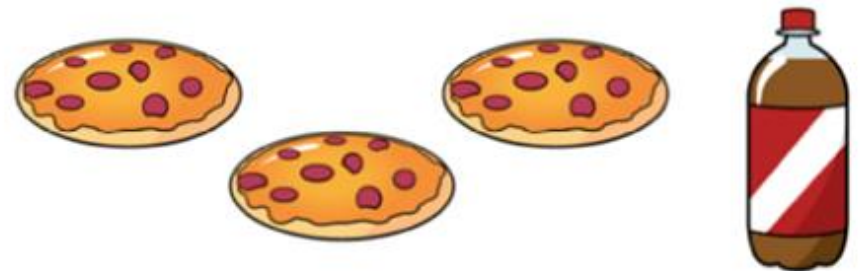


The length of A is double the width of A.

Find the area of one of the rectangles labelled B.

Challenge 6

Mina buys 3 pizzas and a bottle of cola.



A pizza costs £3.20 more than a bottle of cola.

The total cost of the items is £19.40

How much does a pizza cost?

Challenge 7

A barrel is half full with water.

12 litres of water are poured out.

The barrel is now $\frac{1}{5}$ full.

How much water does the barrel hold when full?



Answers

Challenge 1 - 2 cm

Challenge 2 - B

Challenge 3 - 1, 4 or 7

Challenge 4 - Yellow circle

Challenge 5 - 192 cm^2

Challenge 6 - £5.65

Challenge 7 - 40 litres