

1.

Dev says,

I had £10
I gave some money away.



Which expression shows how much money Dev has left?

a is the amount of money, in pounds, that Dev gave away.

Tick **one**.

$10 + a$

$10 \div a$

$a - 10$

$10 - a$

$a \times 10$

1 mark

2.

What is the value of $4x + 7$ when $x = 5$?

1 mark

3. **n** stands for a number.

$$n + 7 = 13$$

What is the value of $n + 10$?

1 mark

4. $x + 2y = 20$

x and y are whole numbers **less than 10**

What could x and y be?

$x =$

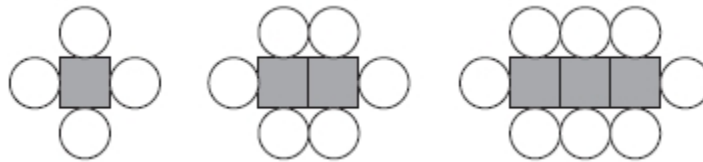
$y =$

1 mark

5.

Here is a sequence of shapes.

Each time a square is added to a shape, two more circles are added.



number of squares, s	1	2	3
number of circles, c	4	6	8

The sequence of shapes continues.

The formula for the sequence is $c = 2s + 2$

Calculate the number of circles when the number of squares in a shape is **150**.

circles

1 mark

How many squares are there in a shape that has **100** circles?

A 20x20 grid is provided for the student to draw a shape containing 100 circles. On the left side of the grid, there is a rounded rectangular callout containing the text "Show your method". In the bottom right corner of the grid, there is a rectangular box containing the text "squares".

2 marks