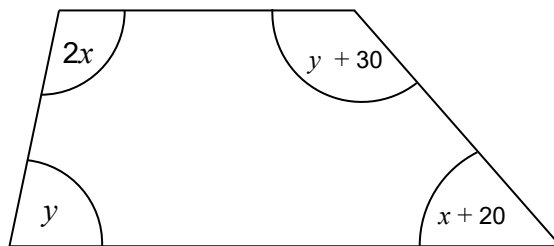


Topic Test 1 (20 minutes)

Simultaneous equations (non-calculator) - Higher

1 Here is a trapezium.



Not drawn accurately

Which **two** of these equations are true?

Circle your answers.

[1 mark]

$2x + y = 180$

$x + y = 160$

$x + y = 130$

$2x + y = 150$

2 Solve the simultaneous equations.

$$2x + y = 13$$

$$x + 2y = 17$$

Do **not** use trial and improvement.

[3 marks]

$x =$ _____

$y =$ _____

-
- 3** A tea and a two buns costs £3.00
Two teas and three buns costs £5.10

Work out the cost of two teas and a bun.

[3 marks]

Answer £ _____

- 4** The cost of one CD and one DVD is £22
A DVD is £4 more expensive than a CD.

Work out the cost of a CD and a DVD.

[4 marks]

CD = £ _____

DVD = £ _____

5 Solve the simultaneous equations.

$$2x + 3y = 70$$

$$3x + 2y = 130$$

Do **not** use trial and improvement.

[4 marks]

$$x = \underline{\hspace{10cm}}$$

$$y = \underline{\hspace{10cm}}$$

6 Solve the simultaneous equations.

$$y = x^2 + x - 3$$

$$y = 2x + 3$$

[5 marks]

$$x = \underline{\hspace{10cm}}$$

$$y = \underline{\hspace{10cm}}$$