

Solving One- and Two-Step Equations

For Pearson Edexcel GCSE Mathematics (1MA1) • Foundation tier

Name _____

Total marks: **28**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

1 (a) Solve $x + 7 = 12$

$x =$
(1)

(b) Solve $4y = 28$

$y =$
(1)

(c) Solve $\frac{p}{5} = 3$

$p =$
(1)

(Total for Question 1 is 3 marks)

2 Solve $6k - 5 = 31$

$k = \dots\dots\dots$
(2)

(Total for Question 2 is 2 marks)

3 Solve $\frac{2y}{3} = 8$

$y = \dots\dots\dots$
(2)

(Total for Question 3 is 2 marks)

4 Solve $7x + 3 = -11$

$x = \dots\dots\dots$
(2)

(Total for Question 4 is 2 marks)

5 Solve $9 - 2x = 1$

$x = \dots\dots\dots$
(2)

(Total for Question 5 is 2 marks)

6 Solve $\frac{x}{4} - 3 = 2$

$x = \dots\dots\dots$
(2)

(Total for Question 6 is 2 marks)

7 Solve $\frac{x - 5}{2} = 9$

$x = \dots\dots\dots$
(2)

(Total for Question 7 is 2 marks)

8 Solve $8w + 5 = 9$

$w = \dots\dots\dots$
(2)

(Total for Question 8 is 2 marks)

9 ABC is a straight line.

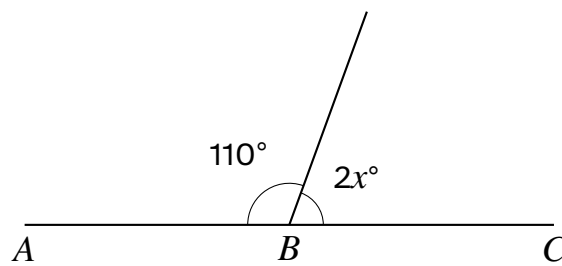


Diagram **NOT** accurately drawn

Work out the value of x .

$x = \dots\dots\dots$
(2)

(Total for Question 9 is 2 marks)

- 10** An equilateral triangle has sides of length $(x + 3)$ cm.

The perimeter of the triangle is 42 cm.

Work out the value of x .

$x = \dots\dots\dots$
(3)

(Total for Question 10 is 3 marks)

- 11** Jess solves $\frac{x}{3} + 2 = 5$

$$x + 2 = 15$$

$$x = 13$$

Explain the mistake Jess has made.

(1)

(Total for Question 11 is 1 mark)

- 12** Sam buys 4 pens and a ruler.
Each pen costs $\text{£}p$ and the ruler costs $\text{£}3$
Sam pays $\text{£}11$ in total.
Work out the cost of one pen.

£
(3)

(Total for Question 12 is 3 marks)

- 13** Solve $5 = 17 - 3y$

$y =$
(2)

(Total for Question 13 is 2 marks)
