

Name: _____

GCSE (1 – 9)

Solving Equations

Instructions

- Use **black** ink or ball-point pen.
- Answer all Questions.
- Answer the Questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

Information

- The marks for each Question are shown in brackets
– *use this as a guide as to how much time to spend on each Question.*

Advice

- Read each Question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every Question.
- Check your answers if you have time at the end

1 Write a number in each box to make the calculation correct.

(i) $7 + \boxed{} = 12$ (1)

(ii) $11 - \boxed{} = 3$ (1)

(Total for Question 1 is 2 marks)

2 Solve $x + 4 = 19$

$x = \dots\dots\dots$

(Total for Question 2 is 1 mark)

3 Solve $\frac{d}{2} = 9.5$

$d = \dots\dots\dots$

(Total for Question 3 is 2 marks)

4 Solve $7y = 63$

$y = \dots\dots\dots$

(Total for Question 4 is 1 mark)

5 Solve $5 - m = 12$

$m = \dots\dots\dots$

(Total for Question 5 is 1 mark)

6 Solve $5g = 40$

$g = \dots\dots\dots$

(Total for Question 6 is 1 mark)

7 Solve $4(a - 3) = 22$

$a =$

(Total for Question 7 is 2 marks)

8 Solve $5(x - 6) = 65$

$x =$

(Total for Question 8 is 2 marks)

9 Solve $8(m - 5) = 48$

$m =$

(Total for Question 9 is 2 marks)

10 (a) Solve $x + 7 = 13$

$x =$

(1)

(b) Solve $3h - 5 = 12$

$h =$

(2)

(Total for Question 10 is 3 marks)

11 (a) Solve $x + x + x = 42$

$x =$
(1)

(b) Solve $\frac{y}{3} = 4$

$y =$
(1)

(c) Solve $2a - 5 = 19$

$x =$
(1)

(Total for Question 11 is 3 marks)

12 Solve $3(b - 5) = 27$

$b =$

(Total for Question 12 is 2 marks)

13 (a) Solve $\frac{2x}{3} = 6$

$x =$
(2)

(b) Solve $2(n + 5) = 15$

$n =$
(2)

(Total for Question 13 is 3 marks)

14 (a) Solve $a + a + a + a = 24$

$a =$
(1)

(b) Solve $b - 3 = 4$

$b =$
(1)

(c) Solve $4c + 6 = 18$

$c =$
(2)

(Total for Question 14 is 4 marks)

15 (a) Solve $4a = 20$

$a =$
(1)

(b) Solve $3y + 9 = 24$

$y =$
(2)

(Total for Question 15 is 3 marks)

16 Solve $\frac{y}{3} - 5 = 4$

$y =$
(Total for Question 16 is 2 marks)

17 (a) Solve $3 = 9 - 4k$

$k =$
(2)

(b) Solve $\frac{d+3}{4} = 5$

$d =$
(2)

(Total for Question 17 is 4 marks)

18 (a) Solve $6w = 4w + 9$

$w =$
(2)

(b) Solve $3x + 8 = 2$

$x =$
(2)

(Total for Question 18 is 4 marks)

19 (a) Solve $2p + 24 = 5p$

$p =$
(2)

(b) Solve $24 = 4(2x - 5)$

$x =$
(2)

(Total for Question 19 is 4 marks)

20 Solve $3x + 12 = 5x + 4$

$x =$

(Total for Question 20 is 2 marks)

21 Solve $2m - 20 = 10 + 7m$

$m =$

(Total for Question 21 is 2 marks)

22 Solve $10 - 2s = s - 8$

$s =$

(Total for Question 22 is 2 marks)

23 Solve $6y + 11 = 3y + 5$

$y =$

(Total for Question 23 is 2 marks)

24 Solve $7y + 18 = 2y + 28$

$y =$
(Total for Question 24 is 2 marks)

25 Solve $2x + 20 = 6x - 12$

$x =$
(Total for Question 25 is 2 marks)

26 Solve $3x - 9 = x - 8$

$x =$
(Total for Question 26 is 2 marks)

27 Solve $10t - 19 = 7t - 14$

$t =$
(Total for Question 27 is 2 marks)
