

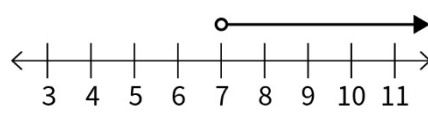
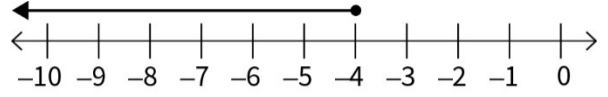
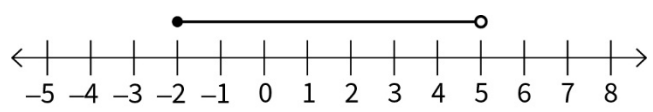
# Oxford Revise | Edexcel GCSE Maths Foundation | Answers

## Chapter 7 Solving equations and inequalities

Question	Answer	Extra information	Marks
7.1 (a)	$5 \times 7 + 2 = 37$		1
7.1 (b)	$(23 - 2) \div 7 = 3$		1
7.2 (a)	$(5 - 5) \div 2 = 0$ $0 + 4 = 4$		1
7.2 (b)	$(-1 - 4) \times 2 = -10$ $-10 + 5 = -5$	Apply inverse operations in the correct order Correct answer	1 1
7.2 (c)	$\frac{h-5}{2} + 4$	First two steps correct Correct answer	1 1
7.3 (a)	$p = q - 3r$		1
7.3 (b)	$p = \frac{r-2}{3}$	Making $3p$ the subject Correct answer	1 1
7.3 (c)	$p = \pm\sqrt{q}$	$\pm$ sign not needed for the mark	1
7.3 (d)	$p = 6r - q$	Making $6r$ the subject Correct answer	1 1
7.4 (a)	$t = \frac{28}{4} = 7$		1

Question	Answer	Extra information	Marks
7.4 (b)	$w = 15 - 6 = 9$		1
7.4 (c)	$15 = 8 + p$ $p = 7$		1
7.4 (d)	$b = 5 \times 10 = 50$		1
7.5 (a)	$\frac{a}{4} - 1 = 10$ $\frac{a}{4} = 11$ $a = 44$	$\frac{a}{4} = 11$ Correct answer	1
			1
7.5 (b)	$\frac{2k+1}{3} = -4$ $2k+1 = -12$ $2k = -13$ $k = -\frac{13}{2}$	$2k+1 = -12$ Correct answer	1
			1
7.5 (c)	$5p+3 = 3p+7$ $2p = 4$ $p = 2$	$2p = 4$ Correct answer	1
			1
7.5 (d)	$3+p = 4p-6$ $9 = 3p$ $p = 3$	$9 = 3p$ Correct answer	1
			1

Question	Answer	Extra information	Marks
7.5 (e)	$9 - 6p = 4 - 11p$ $5p = -5$ $p = -1$	$5p = -5$ Correct answer	1 1
7.6	Sarah = $n$ Ewan = $n - 5$ Cameron = $2n$ $n + n - 5 + 2n = 35$ $4n = 40$ $n = 10$ Sarah scores 10 goals.	$n - 5$ and $2n$ Adding and setting equal to 35 Correct answer	1 1 1
7.7 (a)	$2x - 1 = x + 3$ $x = 4$	Correct equation Correct rearrangement Correct answer	1 1 1

Question	Answer	Extra information	Marks
7.7 (b)	<p>From part (a), the left and right sides are 7 cm.</p> <p>Perimeter is <math>2y + 14 = 34</math>  <math>2y = 20</math>  <math>y = 10</math></p> <p>Side lengths are thus 7 cm and 10 cm, so the area is <math>70 \text{ cm}^2</math></p>	<p>Use <math>x = 4</math> to get one side length of 7 cm</p> <p>Set up an equation to find <math>y</math>.</p> <p><math>y = 10</math></p> <p>Correct answer</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p>
7.8 (a)			1
7.8 (b)			1
7.8 (c)		<p>Any circles at <math>-2</math> and <math>5</math> joined together</p> <p>Correct answer</p>	<p>1</p> <p>1</p>

Question	Answer	Extra information	Marks
7.8 (d)			1
7.9	-1, 0, 1, 2, 3, 4	List starts with -1 or ends with 4 Correct answer	1 1
7.10	-2, -1, 0, 1, 2, 3, 4	Divide all three parts of the inequality by 2 Correct answer	1 1
7.11 (a)	$x \geq 2.5$	2.5 Correct answer	1 1
7.11 (b)	$2x < 6$ $x < 3$	$2x < 6$ Divide both parts by 2 Correct answer	1 1 1
7.11 (c)	$3x > -3$ $x > -1$	$3x > -3$ Divide both parts by 3 Correct answer	1 1 1
7.11 (d)	$2x + 6 > 15$ $2x > 9$ $x > \frac{9}{2}$	Correct subtraction of term from one side $2x > 9$ Correct answer	1 1 1

Question	Answer	Extra information	Marks
7.12	$\frac{2}{3} \times 180 = 120$	$\frac{2}{3} \times 180$	1
	Tom uses 120 g	Correct answer	1
7.13 (b)	Formula		1
7.13 (c)	Equation		1
7.13 (d)	Identity		1
7.13 (e)	Expression		1
7.13 (f)	Formula		1
7.13 (g)	Expression		1
7.13 (h)	Identity		1