

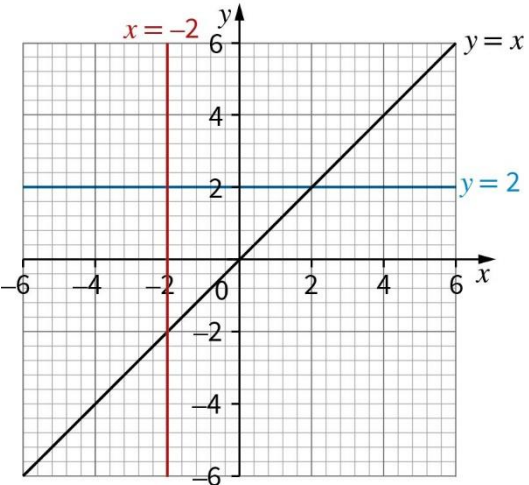
# Oxford Revise | Edexcel GCSE Maths Foundation | Answers

## Chapter 15 Ratio

Question	Answer	Extra information	Marks												
15.1	3 : 7	Must be in the correct order	1												
15.2	3 : 1	Must be in the correct order	1												
15.3	1 : 0.8	Must be in the correct order. $1 : \frac{4}{5}$ also fine	1												
15.4	$\frac{4}{7}$		1												
15.5	For every 2 students who have a cat, there is 1 student who does not. has cat : does not have cat = 2 : 1		1												
15.6	<table border="1"> <thead> <tr> <th></th> <th>2 metres</th> <th>4 metres</th> <th>11 metres</th> </tr> </thead> <tbody> <tr> <td><b>Treated</b></td> <td>£3.00</td> <td>£6.00</td> <td>£16.50</td> </tr> <tr> <td><b>Untreated</b></td> <td>£2.25</td> <td>£4.50</td> <td>£12.38</td> </tr> </tbody> </table>		2 metres	4 metres	11 metres	<b>Treated</b>	£3.00	£6.00	£16.50	<b>Untreated</b>	£2.25	£4.50	£12.38	Method to find at least one cost from top row or any correct entry in the table.	1
		2 metres	4 metres	11 metres											
	<b>Treated</b>	£3.00	£6.00	£16.50											
<b>Untreated</b>	£2.25	£4.50	£12.38												
Method to find at least one cost from bottom row or any correct entry in the table.	1														
Fully correct table	1														
15.7	Perimeter ratio = 5 : 12 : 13 Divide by 2.5 to get the ratio 2 : 4.8 : 5.2 Add these up to get 12 cm	Method to find at least one of the missing sides Adding all three sides Correct answer	1 1 1												

Question	Answer	Extra information	Marks
15.8	9 parts = 270, so each part is 30 ml 8 parts water = $8 \times 30 = 240$ ml	$270 \div 9$ Correct answer	1 1
15.9	$11 + 3 = 14$ parts Each part = $70 \div 14 = 5$ cards Winning cards = $3 \times 5 = 15$ cards	$70 \div 14$ Correct answer	1 1
15.10	3 parts = 9 litres Each part = 3 litres So, white paint = $2 \times 3 = 6$ litres	$9 \div 3$ Correct answer	1 1
15.11	$3 + 4 = 7$ parts Each part has $98 \div 7 = 14$ marks Shorter paper has $3 \times 14 = 42$ marks	$98 \div 7$ Correct answer	1 1
15.12 (a)	Isosceles		1
15.12 (b)	$3 + 2 + 3 = 8$ parts Each part is $180 \div 8 = 22.5^\circ$ Smallest angle = $2 \times 22.5^\circ = 45^\circ$	Dividing 180 by the sum of 2, 3 and 3 Each part is $22.5^\circ$ Correct answer	1 1 1
15.13	$7 - 2 = 5$ 5 parts = 90 1 part = $90 \div 5 = 18$ pencils $7 \times 18 = 126$ pencils	Dividing 90 by 5 Correct answer	1 1
15.14 (a)	1.8 m to 2.2 m		1

Question	Answer	Extra information	Marks
15.14 (b)	1 m : 3 cm 6 m : $6 \times 3 = 18$ cm		1
15.15	184 m = 18 400 cm $18\,400 \div 2000 = 9.2$ cm Sam's model is 9.2 cm tall.	Multiplying by 100 and dividing by 2000 Correct answer	1 1
15.16 (a)	2 cm : 5 km $2\text{ cm} : 5 \times 1000 \times 100 = 500\,000$ cm 1 cm : 250 000 cm  So, the ratio is 1 : 250 000	500 000 cm Correct answer	1 1
15.16 (b)	$5 \times 400\,000 = 2\,000\,000$ cm = 20 000 m = 20 km	2 000 000 cm Correct answer	1 1
15.17	Fraction of people who brought a phone = $\frac{3}{4}$ 10% left their phones on. If $p$ = number of people in the cinema, then $\frac{3}{4}p \times 0.1 = 84$ So $p = \frac{4}{3} \times 840 = 1120$ 1120 people were in the cinema audience.	0.75 or 0.1 or equivalent  Form an equation  Attempt to solve  Correct answer	1  1  1  1

Question	Answer	Extra information	Marks
<p>15.18 (a) – (c)</p>		<p>1 mark for each correct line, labelled</p>	<p>3</p>