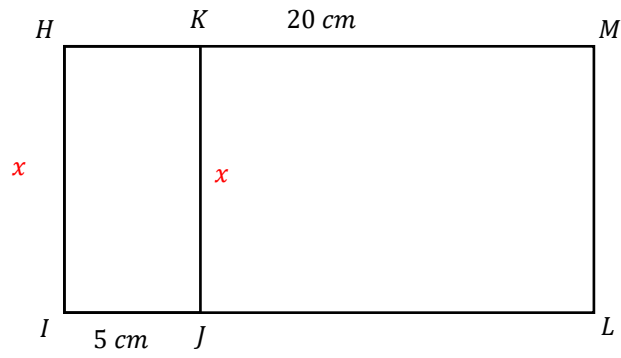


Similar shapes Mark Scheme:		
1(a)	Similar shapes are enlargements of each other, i.e. they have same angles, but all sides have changed by the same scale factor.	[1] Scale factor used in explanation
1(b)	<i>A and H</i>	[1] Correct pair
	<i>F and D</i>	[1] Correct pair
	<i>J and K and L</i>	[1] Correct three
2	<i>A and F</i>	[1] Correct pair
	<i>B and E</i>	[1] Correct pair
	<i>C and D and H</i>	[1] Correct three
3(a)	$\frac{42}{14} = 3$	[1]
3(b)	$12 \times 3 = 36 \text{ cm}$	[1]
3(c)	$51 \div 3 = 17 \text{ cm}$	[1]
4(a)	$\frac{18}{12} = 1.5$	[1]
4(b)	$14 \times 1.5 = 21 \text{ cm}$	[1]
4(c)	$AX : XD = 1 : 1.5$	[1] Correct ratio
	$AX = 10 \text{ cm}, XD = 15 \text{ cm}$	[1] Correct answers
5(a)	2	[1]
5(b)	$x = BE - BC = CE$ $BE = 4.4 \times 2 = 8.8$	[1] Correct BE
	$DE = y = 5 \times 2 = 10$	[1] Correct DE
6(a)	$\frac{48}{16} = 3$	[1]
6(b)	$3^2 = 9$	[1] Scale factor for area
	$9 \times 24 = 216 \text{ cm}^2$	[1] Alternative methods available. 2 marks for correct answer via any method.

Turn over ►



7

$$\frac{x}{5} = \frac{20}{x}$$

[1] Setting the unknown sides to a letter

$$x^2 = 100 \text{ so } x = 10$$

[1] Calculation of unknown

$$\frac{20}{10} = 2 \therefore \text{scale factor} = 2$$

[1] Proof of answer

END