

2. Similarities and enlargement

1	(a) $512000 : 1000000$ $512 : 1000$ $64 : 125$ $4^3 : 5^3$ L.S.F 4:5 $5 \equiv 300cm$ $\therefore 4 \equiv \frac{4 \times 300}{5} = 240cm$ (b) $25 \equiv 1200m^2$ $16 = \frac{16 \times 1200}{25} m^2$ $= 768m^2$ (c) $64 \equiv 800kg$ $\therefore 125 \equiv \frac{125 \times 800}{64}$ $\equiv 1562.5kg$	M₁ M₁ M₁ A₁ B₁ M₁ A₁ B₁ M₁ A₁	✓ A.S.F ✓ ex ✓ V.S.F
2.	Centre (x,y) A(1,4) A1(2,5) $3 \begin{pmatrix} 1-x \\ -4-y \end{pmatrix} = \begin{pmatrix} 2-x \\ 5-y \end{pmatrix}$ $3 - 3x = 2 - x$ $x = \frac{1}{2}$ $-12 - 3y = 5 - y$ $y = -8 \frac{1}{2}$ centre ($\frac{1}{2}$, $-8 \frac{1}{2}$)	M1 M1 A1	
		03	
3.	$10 = x + 6 \quad \checkmark$ $5 = 6$ $60 = 5x + 30$ $30 = 5x$	M1	Application of L.S.F

	$6 = x$ ✓ $10 = 5 + y$ $5 = y$ $10y = 25 + 5y$ $5y = 25$ $Y = 5$ ✓	A1	
		B1	