4	eg $4\pi R^2 = 9\times 4\pi r^2$ oe or		5	M1	M2 for (vol SF =) 27 or $\frac{1}{27}$ or 3^3 or $\frac{1}{3^3}$
	$R = 3r$ oe or 1:3 or 3:1 or 3 or $\frac{1}{3}$			M1 (a correct scale factor of 3 or $R = 3r$ oe implies the first M1)	
	eg $\frac{4}{3}\pi(3r)^3 - \frac{4}{3}\pi r^3 = 117\pi$ oe or $\frac{4}{3}\pi r^3 - \frac{4}{3}\pi\left(\frac{1}{3}r\right)^3 = 117\pi$ or $27\times\frac{4}{3}\pi r^3 - \frac{4}{3}\pi r^3 = 117\pi$ oe or $\frac{4}{3}\pi r^3 - \frac{1}{27}\times\frac{4}{3}\pi r^3 = 117\pi$ oe or oe			M1 for a **correct** equation based on volumes with only one variable eg R or r or x (M3 for $26\times\frac{4}{3}\pi r^3 = 117\pi$ oe or $26\times(Vol)_B = 117\pi$ or $\frac{26}{27}\times\frac{4}{3}\pi r^3 = 117\pi$ oe or $\frac{26}{27}\times(Vol)_A = 117\pi$	
	$(r =)\sqrt[3]{\frac{117\times 3}{104}}\left(=\sqrt[3]{\frac{27}{8}}\right)$ or $(R =)\sqrt[3]{\frac{117\times 81}{104}}\left(=\sqrt[3]{\frac{729}{8}} = \frac{9}{2}\right)$			M1 dep on previous M mark	
	Working required	$\frac{3}{2}$		A1 oe dep on M2	
					Total 5 marks