23 (i)		(6, 7)	1	B1	
(ii)		(2, −3)	1	B1	
					Total 2 marks

24 (a)	eg $\frac{1}{3}\times\pi\times x^2\times 3x\left(=\pi x^3\right)$ oe **or** $\frac{1}{2}\times\frac{4}{3}\times\pi\times x^3\left(=\frac{4}{6}\pi x^3=\frac{2}{3}\pi x^3\right)$ oe **or** $\frac{4}{3}\times\pi\times(kx)^3$ oe		4	M1	for an expression for the volume of the cone **or** the hemisphere **or** the sphere NB Ignore missing brackets around *kx* for this mark Allow *r* for *x* for all M marks
	eg $\frac{4}{3}\times\pi\times(kx)^3=12.5\times\left(\frac{1}{2}\times\frac{4}{3}\pi x^3+\frac{1}{3}\pi x^2(3x)\right)$ oe **or** $\frac{4}{3}\times\pi\times(kx)^3=12.5\left(\frac{2}{3}\pi x^3+\pi x^3\right)$ oe **or** $\frac{4}{3}\times\pi\times(kx)^3=12.5\times\frac{5}{3}\pi x^3$ oe **or** $\frac{4}{3}\times\pi\times(kx)^3=\frac{125}{6}\pi x^3$ oe			M1	for a **correct** equation for the volumes NB If $(kx)^3$ not expanded at this stage then must see brackets
	eg $\left(k^3=\right)\frac{\frac{125}{6}\pi}{\frac{4}{3}\pi}$ oe **or** $\left(k^3=\right)\frac{125}{8}$ oe **or** $(k=)\sqrt[3]{\frac{125}{8}}$ oe $k^3x^3=\frac{12.5\times\frac{5}{3}\pi x^3}{\frac{4}{3}\pi}$ oe **or** $kx=\frac{\sqrt[3]{12.5\times\frac{5}{3}\pi x^3}}{\sqrt[3]{\frac{4}{3}\pi}}$ **or** $kx=\sqrt[3]{\frac{125x^3}{8}}$ oe			M1	for a **correct** calculation for k or k^3 or for a **correct** equation for kx or k^3x^3
	Working not required, so correct answer scores full marks (unless from obvious incorrect working)	2.5		A1	oe
(b)		64	1	B1	
					Total 5 marks