23	$\frac{1}{3}\pi\times(5x)^2\times 6x$ oe or $50\pi x^3$ oe or $\frac{1}{2}\times\frac{4}{3}\times\pi\times(2x)^3$ or $\frac{16}{3}\pi x^3$ oe or $\frac{4}{3}\times\pi\times(2x)^3$ or $\frac{32}{3}\pi x^3$ oe		5	M1 for finding the volume of cone or hemisphere or sphere NB Ignore missing brackets around $5x$ and $2x$ for this mark
	$\frac{1}{3}\pi\times(5x)^2\times 6x-\frac{1}{2}\times\frac{4}{3}\times\pi\times(2x)^3=6948\pi$ oe or $50\pi x^3-\frac{16}{3}\pi x^3=6948\pi$ or $\frac{134}{3}\pi x^3=6948\pi$ oe			M1 for a **correct** equation for the volume of the shape NB If not expanded at this stage then must see brackets
	$\left(x^3=\right)\frac{6948\pi\times 3}{134\pi}\left(=\frac{10422}{67}=155.(552...)\right)$ oe or $\left(x=\right)\sqrt[3]{\frac{6948\pi\times 3}{134\pi}}\left(=\sqrt[3]{\frac{10422}{67}}=\sqrt[3]{155.(552...)}=5.37(8...)\right)$ oe			M1 for rearranging the **correct** equation to find the value of x^3 or x Accept 5.4 or better
	$3\times\pi\times(2\times"5.37(8...)")^2$ oe or $12\times\pi\times$ "5.37(8..)"^{2} oe			M1 for finding the surface area of the hemisphere
	Working not required, so correct answer scores full marks (unless from obvious incorrect working)	1090		A1 allow 1086 – 1100 Special case for using 6948 without π SC B3 for $x^3 = 49.5(138…)$ or $x = 3.67(205…)$ SC B4 for awrt 508
				Total 5 marks