22	eg $\frac{4}{3}\pi r^3 = 288\pi$ oe $\frac{4}{3}\pi\left(\frac{x}{2}\right)^3 = 288\pi$ oe		6	M1 for using the formula for the volume of a sphere correctly and equating it to 288π
	$x = 12$			A1
	$\sqrt{(5\times'12')^2+(0.5\times'12')^2}\,(=6\sqrt{101}=60.299...)$ oe **or** $(OC=)0.5\sqrt{'24'^2+'12'^2}\,(=6\sqrt{5})$ **and** $AC=\sqrt{'(6\sqrt{5})'^2+'60'^2}\,(=6\sqrt{105})$ **and** $\sqrt{'(6\sqrt{105})'^2-'12'^2}\,(=6\sqrt{101})$ oe			M1 (dep on first M1 and using their value for x) for using Pythagoras to find the perp height of faces *CAD* or *BAE* or a correct method to find angle *CAD* or *BAE*
	$\sqrt{(5\times'12')^2+(1\times'12')^2}\,)(=12\sqrt{26}=61.188...))$ oe **or** $(OC=)0.5\sqrt{'24'^2+'12'^2}\,(=6\sqrt{5})$ **and** $AC=\sqrt{'(6\sqrt{5})'^2+'60'^2}\,(=6\sqrt{105})$ **and** $\sqrt{'(6\sqrt{105})'^2-'6'^2}\,(=12\sqrt{26})$ oe			M1 (dep on first M1 and using their value for x) for using Pythagoras to find the perp height of faces *ABC* or *AED* or a correct method to find angle *BAC* or *DAE*
	(‘12’ × 2(‘12’)) + 2(0.5 × ‘12’ × ‘$12\sqrt{26}$ ’) +2(0.5 × 2‘12’ × ‘ $6\sqrt{101}$ ’) oe eg $'288'+2\times'72\sqrt{26}'+2\times'72\sqrt{101}'$ or ‘288’ + 2 × ‘367.129’…+ 2 × ‘723.59…’ oe			M1 (dep on first M1 using their value for x and correct working for heights of each triangle)for working out the total surface area of the pyramid
	Correct answer scores full marks (unless from obvious incorrect working)	2469		A1 2469 - 2470
				Total 6 marks

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