Question	Answer	Mark	Mark scheme	Additional guidance
19	6	P1	for starting process, by defining height, radius **and** using Pythagoras to form an equation for the slant height l eg height = h, radius = $\frac{3}{4}h$ **and** $l^2 = h^2 + \left(\frac{3h}{4}\right)^2 \left(= \frac{25}{16}h^2\right)$ or $(l =)\sqrt{h^2 + \left(\frac{3h}{4}\right)^2} \left(= \frac{5}{4}h\right)$ oe eg $r = 3x$ **and** $h = 4x$ **and** $l^2 = (3x)^2 + (4x)^2$	Can use any other letter than h provided it is defined eg height = x
		P1	(dep P1) for process to form a correct expression for the curved surface area in terms of a single variable, eg $\pi \times \frac{3}{4}h \times "\frac{5}{4}h" \left(= \frac{15}{16}\pi h^2\right)$ or $\pi \times 3x \times "5x"$ where $h = 4x$	May include area of circle eg $\pi \times \left(\frac{3}{4}h\right)^2 + \pi \times \frac{3}{4}h \times "\frac{5}{4}h" \left(= \frac{24}{16}\pi h^2\right)$
		P1	for forming and simplifying a correct equation to find height, eg $\frac{24\pi}{16}h^2 = 54\pi$	
		A1	cao	