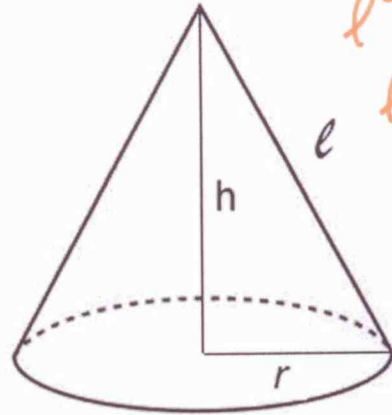
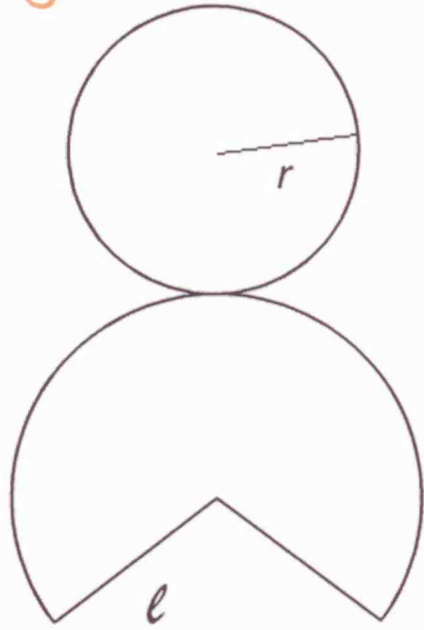


height = 4cm

radius = 3cm



$$\begin{aligned}l^2 &= h^2 + r^2 \\l^2 &= (4)^2 + (3)^2 \\l^2 &= 16 + 9 \\l^2 &= 25 \\ \sqrt{l^2} &= \sqrt{25} \\l &= 5\text{cm}\end{aligned}$$

Total Surface Area

$$\begin{aligned}S &= \pi r l + \pi r^2 \\&= \pi (3)(5) + \pi (3)^2 \\&= 15\pi + 9\pi \\&= 24\pi \text{ cm}^2 \approx 75.398 \text{ cm}^2\end{aligned}$$

OR

$$\begin{aligned}S &= \pi r (l + r) \\&= \pi (3) (5 + 3) \\&= 3\pi (8) \\&= 24\pi \text{ cm}^2 \text{ or } 75.398 \text{ cm}^2\end{aligned}$$