

673) $B = 16 \pi \text{ cm}^2$

$M = 2B = 2 \cdot 16 \pi \text{ cm}^2 = 32 \pi \text{ cm}^2$

$V = ?$

$B = r^2 \pi = 4^2 \pi \text{ cm}^2$

$M = 32 \pi \text{ cm}^2 = 2r^2 \pi H$

$32 \pi \text{ cm}^2 = 2 \cdot 4^2 \pi H$

$32 \pi \text{ cm}^2 = 8 \pi H$

$H = 4 \text{ cm}$

$V = BH$

$V = 16 \pi \text{ cm}^2 \cdot 4 \text{ cm}$

$V = 64 \pi \text{ cm}^3$

674) $a = 3 \text{ cm} = H$

$b = 4 \text{ cm} = r$

$P = ?$, $V = ?$

$P = 2B + M = 2 \cdot 16 \pi \text{ cm}^2 + 24 \pi \text{ cm}^2 = 56 \pi \text{ cm}^2$

$B = r^2 \pi = 16 \pi \text{ cm}^2$

$M = 2r^2 \pi H = 24 \pi \text{ cm}^2$

$V = BH = 16 \pi \text{ cm}^2 \cdot 3 \text{ cm} = 48 \pi \text{ cm}^3$

675) a) $r = 2 \text{ cm}$, $P = 32 \pi \text{ cm}^2$

$H = ?$

$P = 2B + M = 2 \cdot 4 \pi \text{ cm}^2 + 4 \pi H \text{ cm}$

$B = r^2 \pi = 4 \pi \text{ cm}^2$

$M = 2r^2 \pi H = 4 \pi H \text{ cm}$

$32 \pi \text{ cm}^2 = 8 \pi \text{ cm}^2 + 4 \pi H \text{ cm}$

$4 \pi H \text{ cm} = 24 \pi \text{ cm}^2$

$H = 6 \text{ cm}$

676) a) $a = 4 \text{ cm} = H = r$

$P_{\text{op}} = ?$

$P_{\text{op}} = 2rH$

$P_{\text{op}} = 8 \cdot 4 = 32 \text{ cm}^2$

b) $a = 3 \text{ cm} = H$

$b = 6 \text{ cm} = r$

$P_{\text{op}} = ?$

$P_{\text{op}} = 2rH$

$P_{\text{op}} = 2 \cdot 6 \cdot 3 = 36 \text{ cm}^2$

c) $a = r = 3 \text{ cm}$

$b = H = 6 \text{ cm}$

$P_{\text{op}} = ?$

$P_{\text{op}} = 2rH$

$P_{\text{op}} = 2 \cdot 3 \cdot 6 = 36 \text{ cm}^2$