SA of cylinders

1st find area of bases (circles)

2nd find area of rectangle

$A = lw$

→ l = circumference

$l = \pi d$

→ w = h of cylinder

3rd Add areas

Formula: $SA = 2\pi r^2 + \pi d\, h$

From WS given out in class

1) $SA = 2\pi r^2 + \pi d h$

$SA = 2 \times 3.14 \times 36 + 3.14 \times 12 \times 13$

$SA = 226.08 + 489.84$

$SA = 715.92 m^2$

2) $SA = 2\pi r^2 + \pi d h$

$SA = 2 \times 3.14 \times 16 + 3.14 \times 8 \times 9$

$SA = 100.48 + 226.08$

$SA = 326.56 m^2$

3) $SA = 2\pi r^2 + \pi dh$

$SA = 2 \times 3.14 \times (2.9)^2 + 3.14 \times 5.8 \times 18.7$

$SA = 2 \times 3.14 \times 8.41 + 3.14 \times 5.8 \times 18.7$

$SA = 52.8148 + 340.5644$

$\boxed{SA = 393.3792\ mm^2}$

4) $SA = 2\pi r^2 + \pi dh$

$SA = 2 \times 3.14 \times 4 + 3.14 \times 4 \times 8$

$SA = 25.12 + 100.48$

$\boxed{SA = 125.6\ m^2}$

5) $SA = 2\pi r^2 + \pi d h$

$SA = \underline{2 \times 3.14 \times 121} + \underline{3.14 \times 22 \times 4}$

$SA = 759.88 + 276.32$

$\boxed{SA = 1036.2\ cm^2}$