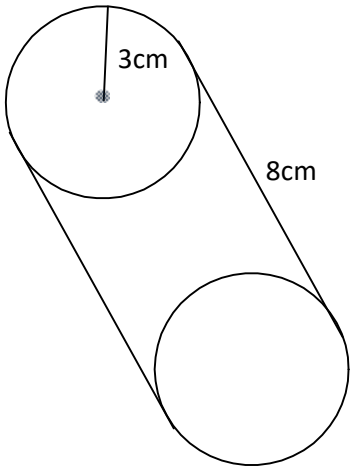
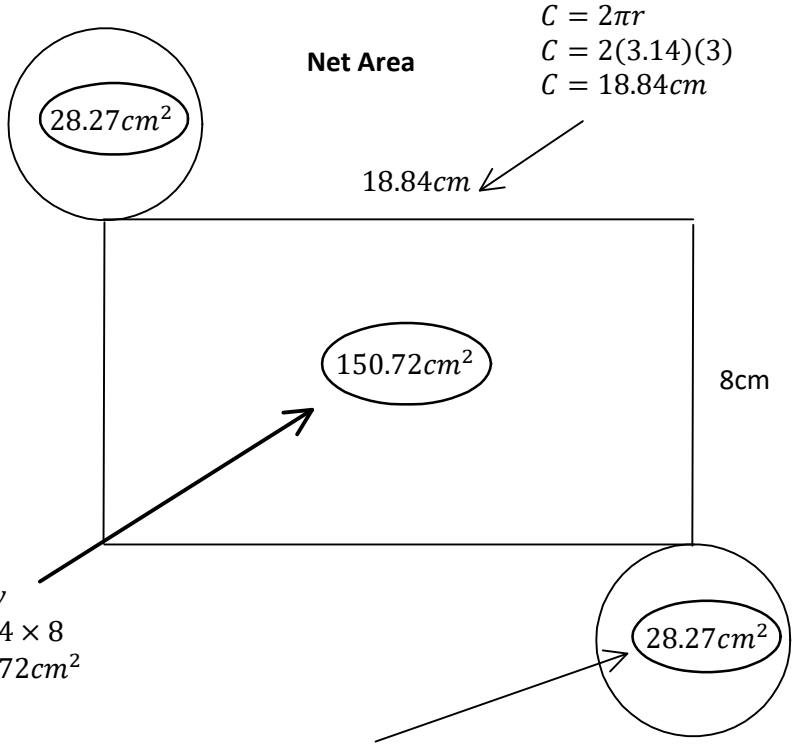
M8 - 5.3 - Cylinder/Triangular Prism Surface Area Notes

Cylinder



Net Area



$C = 2\pi r$
$C = 2(3.14)(3)$
$C = 18.84cm$

Area $= l \times w$
A $= 18.84 \times 8$
A $= 150.72cm^2$

$A = \pi r^2$
$A = (3.14)(3)^2$
$A = 28.27cm^2$

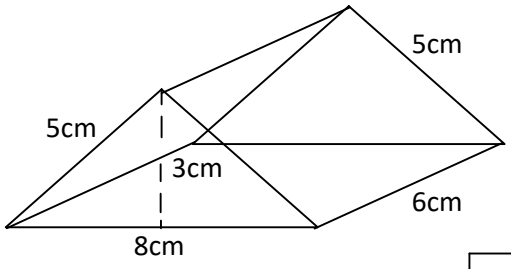
In terms of π
$SA = 66\,\pi\ cm^2$

$SA = 28.27cm^2 + 28.27cm^2 + 150.72cm^2$

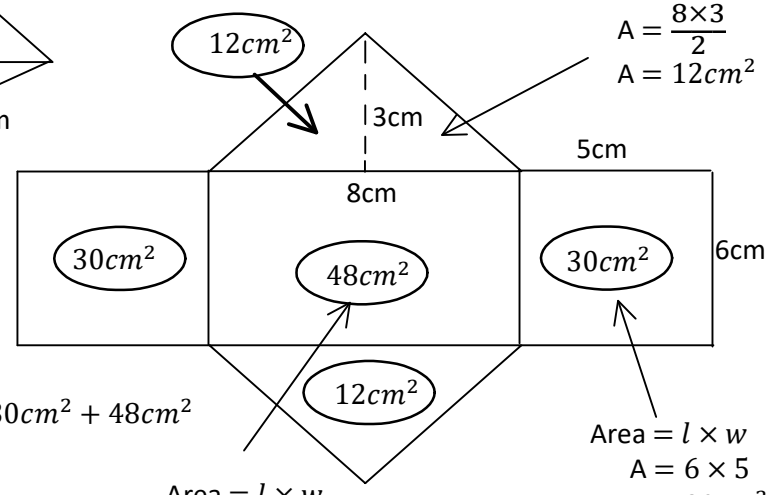
$SA = 207.26\ cm^2$

Notice: the width of the rectangle is the circumference of the circle.

Triangular Prism



Net Area



Area $= \frac{b \times h}{2}$
A $= \frac{8 \times 3}{2}$
A $= 12cm^2$

Area $= l \times w$
A $= 6 \times 5$
A $= 30cm^2$

Area $= l \times w$
A $= 6 \times 8$
A $= 48cm^2$

$SA = 12cm^2 + 12cm^2 + 30cm^2 + 30cm^2 + 48cm^2$

$SA = 132cm^2$

Notice: the front and back are the same, and sides are the same.