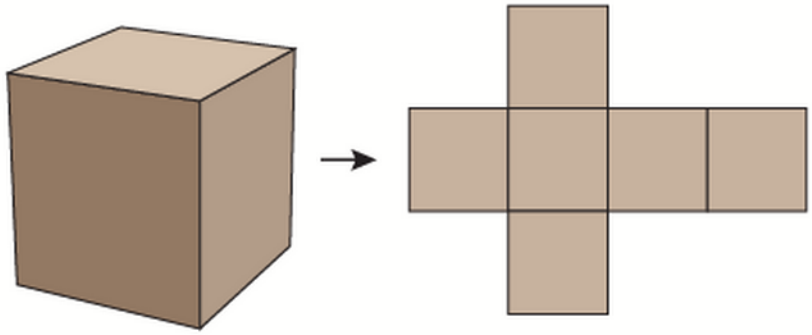
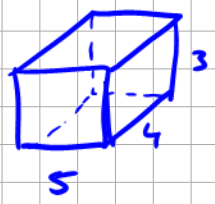
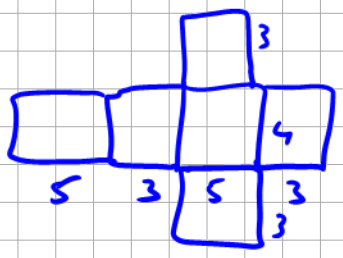
Nets

Box

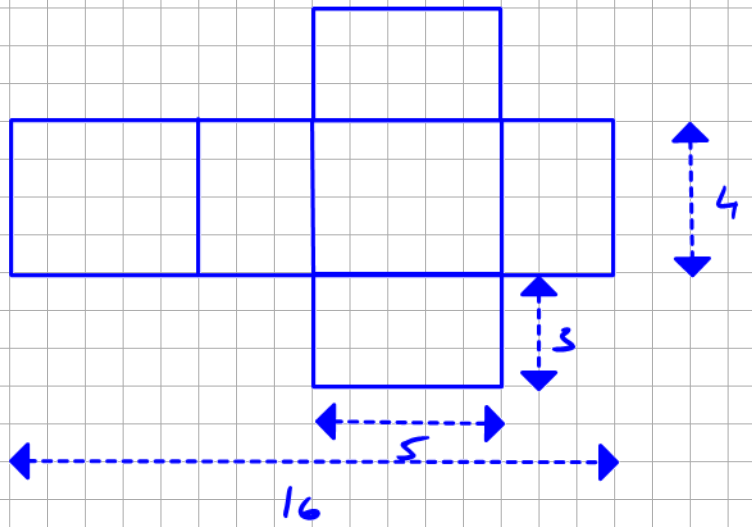


A cuboid has a length of 5cm breadth of 4cm and height of 3cm. Construct the net of cuboid and hence find area of cuboid.





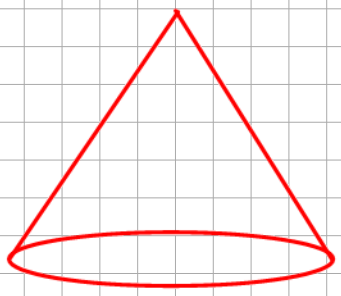
Plan.



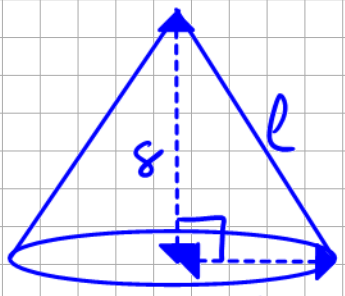
Area = $16 \times 4 = 64$

$= 2(5)(3) = 30$

$94\ cm^2$



Cone has radius of 6cm and height 8cm. Find area of material required to make cone. Draw the net of the solid cone.



$A = \pi r^2 + \pi r l$

l = slant height

h = vertical height

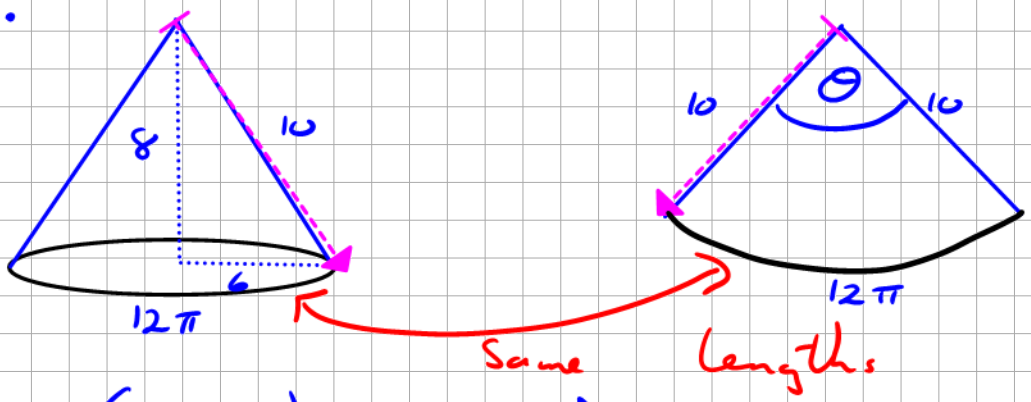
r = radius.

$$l^2 = h^2 + r^2$$

$l^2 = 8^2 + 6^2$

$l = 10$

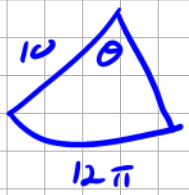
$A = \pi(6)^2 + \pi(6)(10) = 96\pi \text{ cm}^2$



Circumference of circle $= 2\pi r$

$= 2\pi(6) = 12\pi$

Sector



$$2\pi r\left(\frac{\theta}{360}\right) = l$$

$$\frac{\pi \, 10 \, (\theta)}{180} = 12\pi$$

$\pi\theta = 18(12\pi)$

$\theta = 216°$