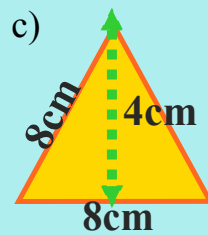
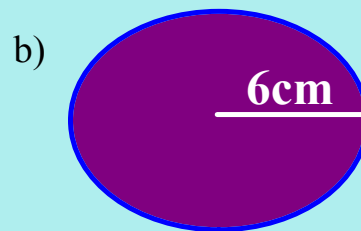
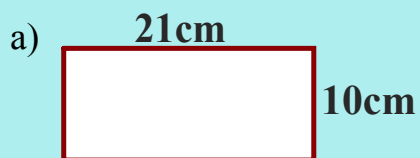
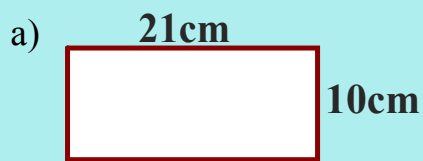


Measurement



Find the area of the following shapes.

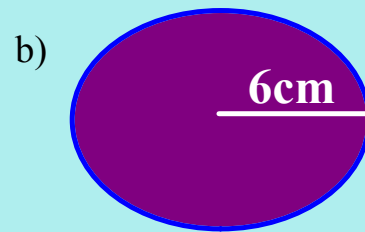




$$A = l \times w$$

$$A = 21 \times 10$$

$$A = 210 \text{ cm}^2$$

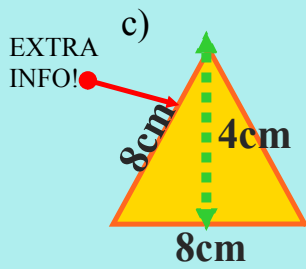


$$A = \pi r^2$$

$$A = (3.14)(6)^2$$

$$A = (3.14)(36)$$

$$A = 113.04 \text{ cm}^2$$

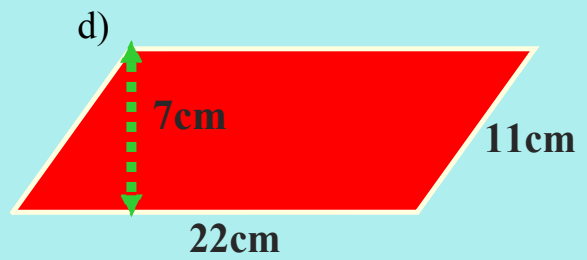


$$A = \frac{b \times h}{2}$$

$$A = \frac{8 \times 4}{2}$$

$$A = \frac{32}{2}$$

$$A = 16 \text{ cm}^2$$

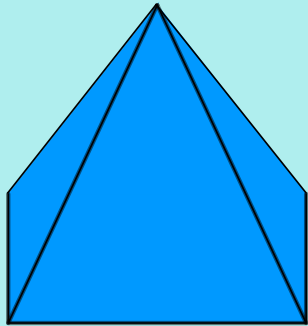


$$A = b \times h$$

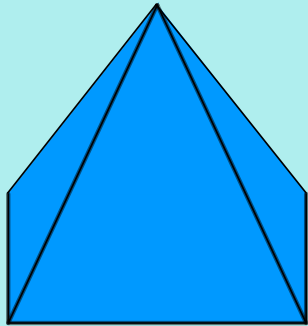
$$A = 22 \times 7$$

$$A = 154 \text{ cm}^2$$

*Draw the faces
of this
3D-figure*



The faces of this 3D-figure are:

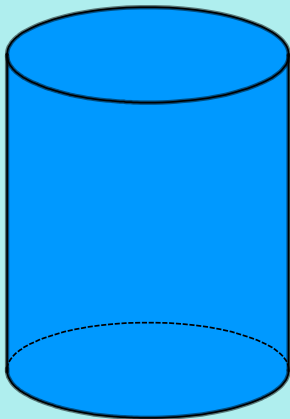


sides

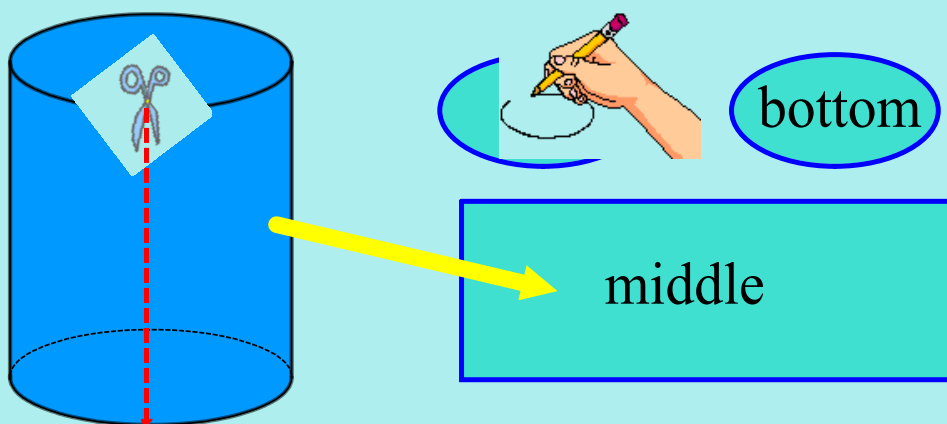


base (bottom)

*Draw the faces
of this
3D-figure*



The faces of this 3D-figure are:



To calculate ...

Surface area



1. Identify all sides or faces.



2. Calculate the area of each face.

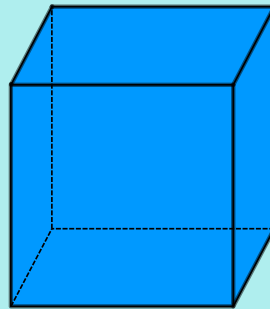


3. Add all areas together.

To calculate
SURFACE AREA
you must first
recognize every
side or face.



Draw the faces
of this
3D-figure



To calculate
SURFACE AREA
you must first
recognize every
side or face.



The faces of this 3D-figure are:

front

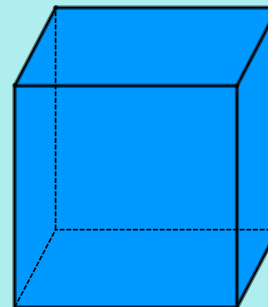
back

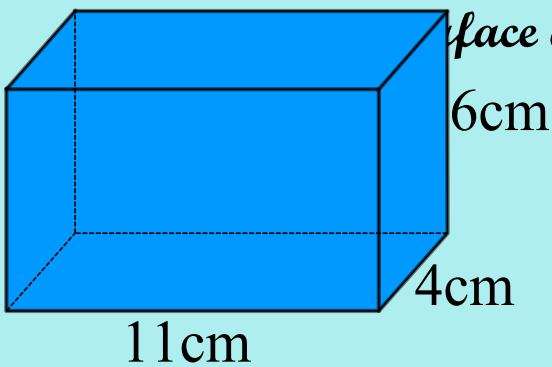
side

side

top

bottom





Surface area of the following 3D-Shape.

$$4 \begin{array}{|c|} \hline \times 2 \\ \hline \end{array} \begin{array}{l} \text{Top} \\ \text{\& Bottom} \end{array}$$

$$4 \times 11 = 44$$

$$44 \times 2 = 88 \text{ cm}^2$$

$$\begin{array}{|c|} \hline \times 2 \\ \hline \end{array} \begin{array}{l} 6 \text{ Front} \\ \text{\& Back} \end{array}$$

$$11 \times 6 = 66$$

$$66 \times 2 = 132 \text{ cm}^2$$

$$\begin{array}{|c|} \hline \times 2 \\ \hline \end{array} \begin{array}{l} 6 \\ \text{Sides} \end{array}$$

$$4 \times 6 = 24$$

$$24 \times 2 = 48 \text{ cm}^2$$

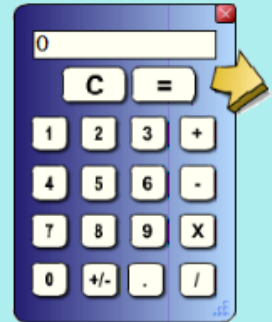
Total Surface Area

$$88 + 132 + 48 = 268 \text{ cm}^2$$

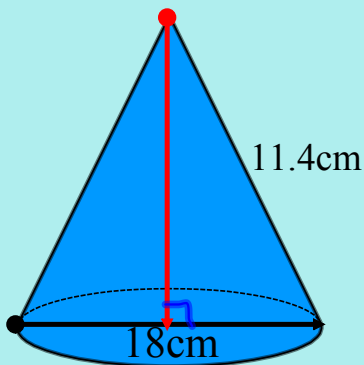
Calculate the surface area of the following 3D-Shape.



$$\begin{aligned} & 2\pi r^2 + 2\pi rh \\ & 2\pi(2)^2 + 2\pi(2)(21) \\ & 2\pi(4) + 2\pi(42) \\ & 25.13 + 263.9 \\ & = 289.03\text{cm}^2 \end{aligned}$$



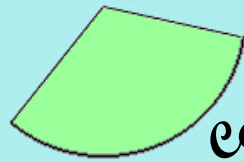
Calculate the surface area of the following 3D-Shape.



This is special!



$$A = \pi r^2$$



Careful!

$$A = \pi r s$$

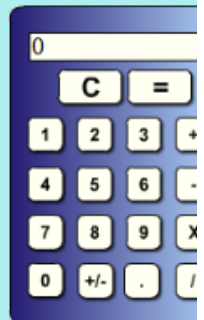
$$SA = \pi r^2 + \pi r s$$

$$SA = \pi(9)^2 + \pi(9)(11.4)$$

$$SA = \pi(81) + \pi(102.6)$$

$$SA = 254.47 + 322.33$$

$$SA = 576.8 \text{ cm}^2$$



Attachments

Methods_of_Determining_Probability.asf

The_Many_Sided_World_of_Geometry__Program_6__Figuring_Out_Area.asf