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

Draw the faces
of this
3D-figure

The faces of this 3D-figure are:
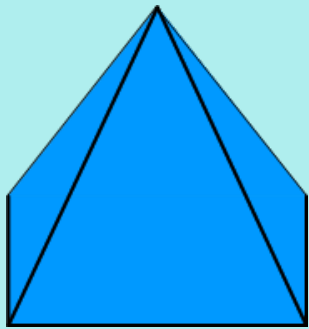
front	back

side	side

top	bottom

Draw the faces
of this
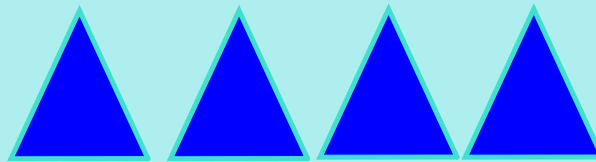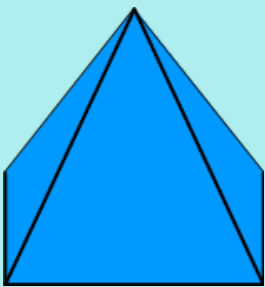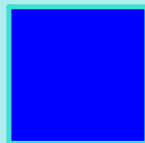3D-figure

The faces of this 3D-figure are:

4 sides

base (bottom)

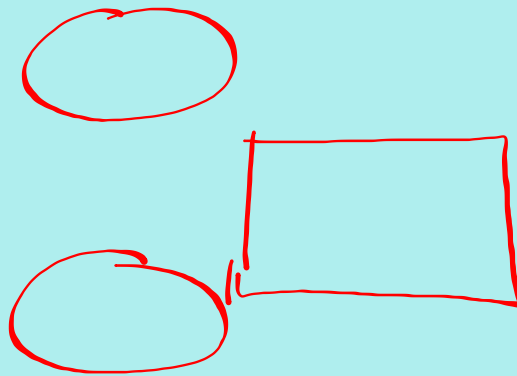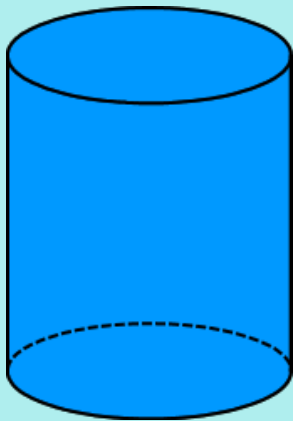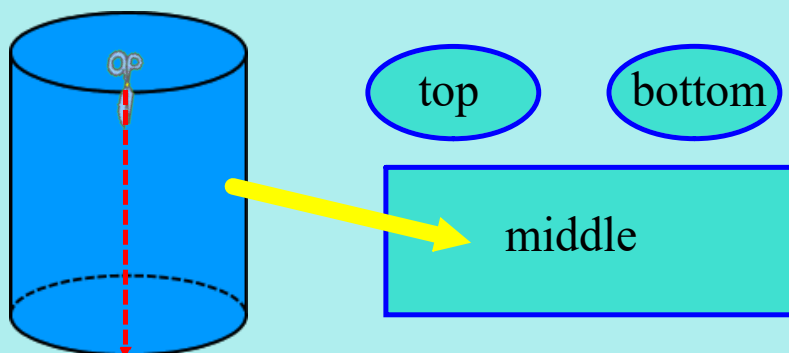# Draw the faces of this 3D-figure

The faces of this 3D-figure are:

top   bottom

middle

To calculate ...

Surface area

1. Identify all sides or faces.
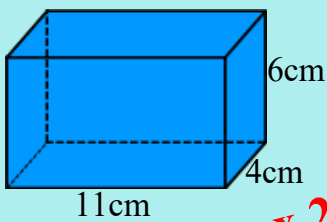
2. Calculate the area of each face.

3. Add all areas together.

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

6cm

4cm

11cm

x 2

Top & Bottom

x 2

Front & Back

x 2

Sides

Top & Bottom (will always be the same)
Front & Back (will always be the same)
Side & Side (will always be the same)

A = 2(L x W)
A = 2(11 x 4)
   = 2(44)
   = 88 cm²

A = 2(L x W)
   = 2(11 x 6)
   = 2(66)
   = 132 cm²

A = 2(L x W)
   = 2(4 x 6)
   = 2(24)
   = 48 cm²

Total Surface Area

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

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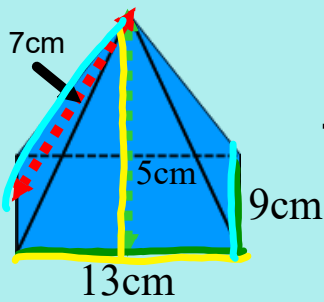
Bottom

$A = L \times W$
$A = 13 \times 9$
$A = 117 \text{ cm}^2$

7cm

5cm

9cm

13cm

Front & Back

x 2
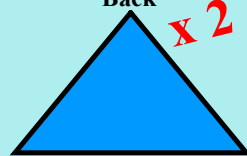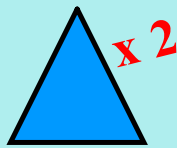
$A = 2\left(\dfrac{b \times h}{2}\right)$

$A = 2\left(\dfrac{13 \times 5}{2}\right)$

$A = 2(65/2)$
$A = 65 \text{ cm}^2$

Sides

x 2

$A = 2\left(\dfrac{b \times h}{2}\right)$

$A = 2\left(\dfrac{9 \times 7}{2}\right)$

$A = 2(63/2)$
$A = 63 \text{ cm}^2$

Total Surface Area = 117 + 65 + 63
= 245 cm^2

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

This is special!

2cm

Be Careful!

OIL

HAZARDOUS

21cm

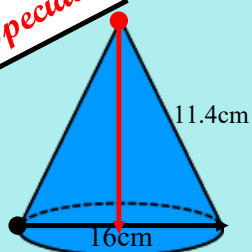$SA = 2\pi r^2 + 2\pi rh$

$SA = 2(3.14)(2)^2 + 2(3.14)(2)(21)$

$SA = 2(3.14)(4) \ + \ 263.76$

$SA = 25.12 \ + \ 263.76$

$SA = 288.88cm^2$
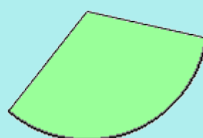
Calculate the surface area of the following 3D-Shape.

This is special!

Careful!

8cm

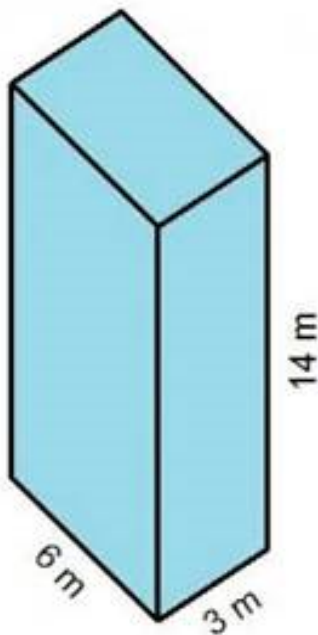$A = \pi r^2$

$A = \pi rs$

11.4cm

16cm

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

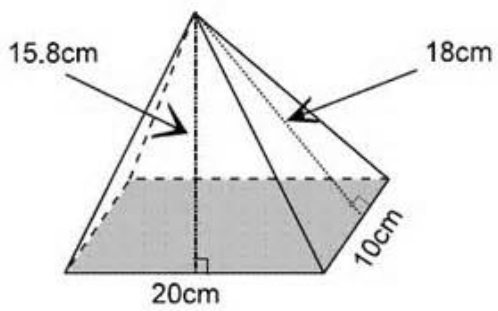$SA = (3.14)(8)^2 + (3.14)(8)(11.4)$

$SA = (3.14)(64) + 286.368$

$SA = 200.96 + 286.368$

$SA = 487.328 \ cm^2$

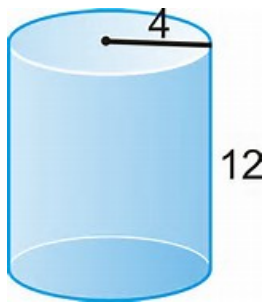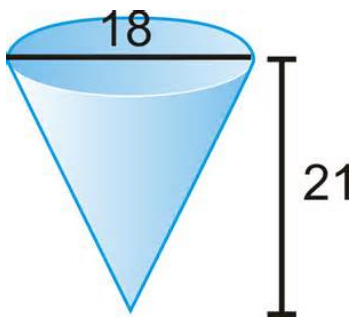# Calculate Surface Area

14 m

6 m

3 m

Calculate Surface Area

Calculate Surface Area

Calculate Surface Area

Attachments

Methods_of_Determining_Probability.asf

The_Many_Sided_World_of_Geometry__Program_6__Figuring_Out_Area.asf