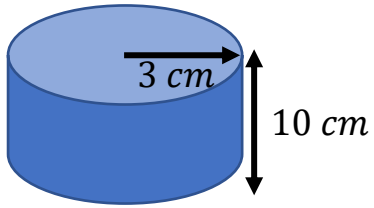
a) Calculate the surface area of the cylinder



Area of top: *radius is* $3cm$

$= \pi \times r^2$

$= \pi \times 3^2$

$= 28.27433 \ldots$

$= 28.27cm^2$

Area of base:

$= 28.27cm^2$

Area of curved surface: *height is* $10cm$

$= 2 \times \pi \times r \times h$

$= 2 \times \pi \times 3 \times 10$

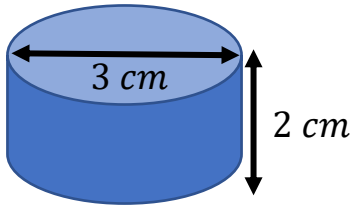
$= 188.49555 \ldots$

$= 188.5cm^2$

Sum of the faces:

$188.5 + 28.27 + 28.27 = 245.04cm^2$

b) Calculate the surface area of the cylinder



Area of top: *radius is* $1.5cm$

$= \pi \times r^2$

$= \pi \times 1.5^2$

$= 7.06858 \ldots$

$= 7.07cm^2$

Area of base:

$= 7.07cm^2$

Area of curved surface: *height is* $2cm$

$= 2 \times \pi \times r \times h$

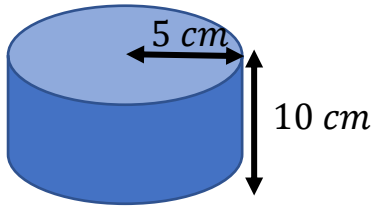
$= 2 \times \pi \times 1.5 \times 2$

$= 18.84955 \ldots$

$= 18.85cm^2$

Sum of the faces:

c) Calculate the surface area of the cylinder



Area of top: *radius is* $5cm$

$= \pi \times r^2$

$= \pi \times 5^2$

$= 78.53981 \ldots$

$= 78.54cm^2$

Area of base:

$= 78.54cm^2$

Area of curved surface: *height is*

$= 2 \times \pi \times r \times h$

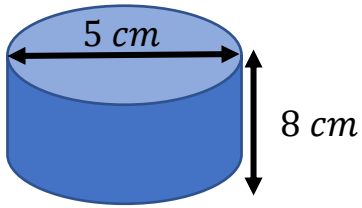
$= 2 \times \pi \times$

$=$

$=$

Sum of the faces:

d) Calculate the surface area of the cylinder



Area of top: *radius is* $2.5cm$

$= \pi \times r^2$

$= \pi \times 2.5^2$

$=$

$=$

Area of base:

$=$

Area of curved surface: *height is*

$= 2 \times \pi \times r \times h$

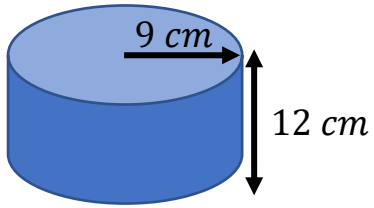
$= 2 \times \pi \times$

$=$

$=$

Sum of the faces:

e) Calculate the surface area of the cylinder



Area of top: *radius is*

$= \pi \times r^2$

$= \pi \times$

$=$

$=$

Area of base:

$=$

Area of curved surface: *height is*

$=$

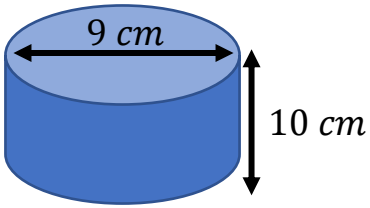
$=$

$=$

$=$

Sum of the faces:

f) Calculate the surface area of the cylinder



Area of top:

Area of base:

Area of curved surface:

Sum of the faces: