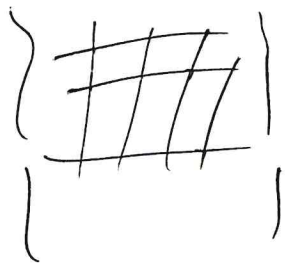
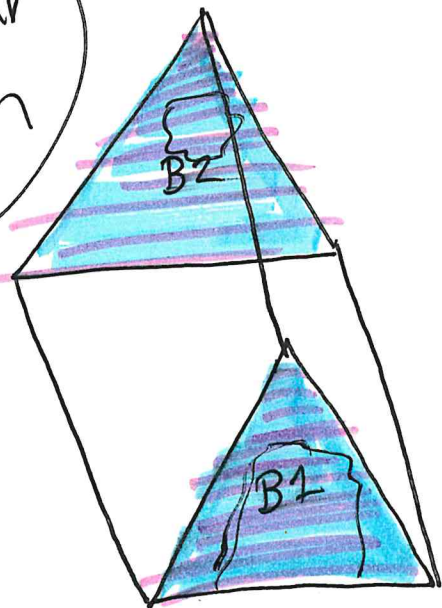


1/21/2022 M3 Lesson 6

Prisms : Cylinders

Prism: • 2 congruent bases
• the number of lateral faces are the number of sides on the base

Triangular Prism



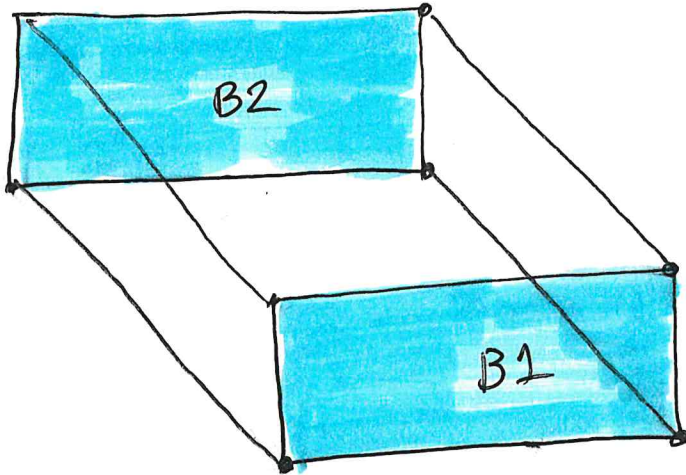
Bases (3 sides)

2 triangles

L.F. (lateral faces)

3 Lateral faces (sides)

Rectangular Prism



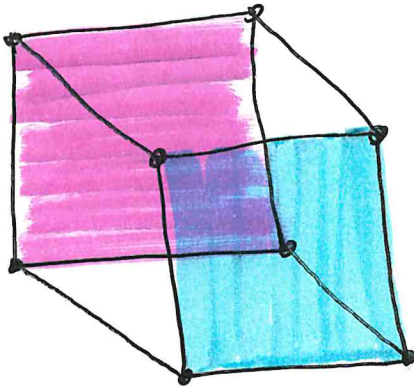
Base (2)

Rectangle 4 sides

Lateral sides

4 sides

Square Prism (cube)



Bases (2)

square (4 sides)

Lateral sides

4 sides

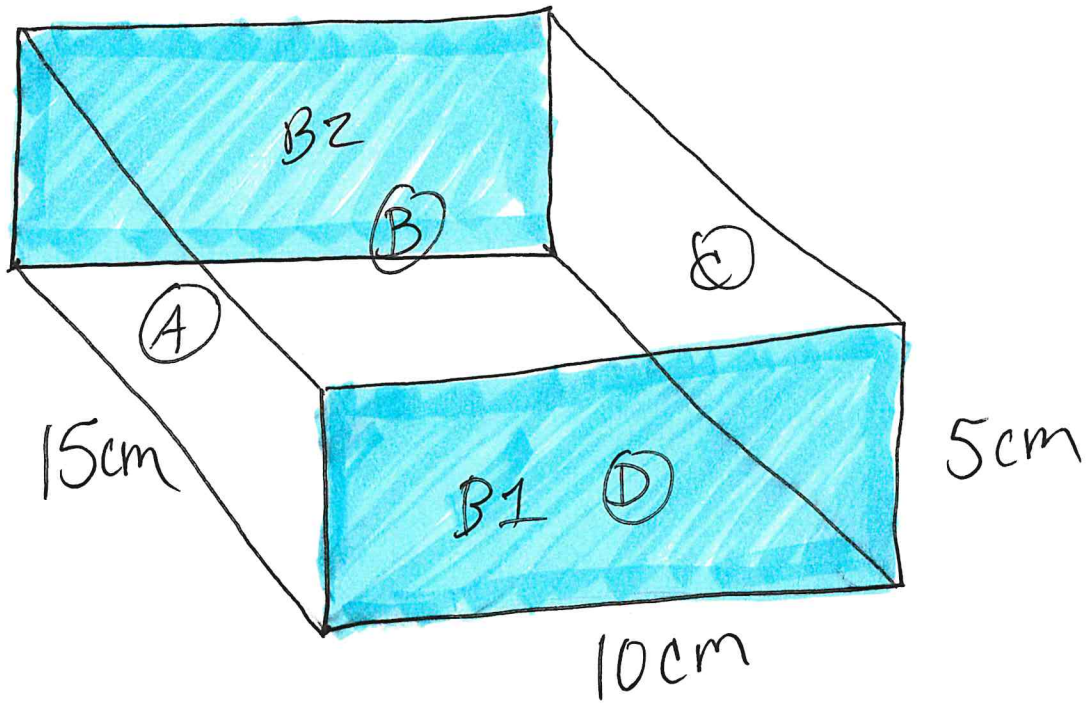
Surface Area:
(Prism)

$$2B + LA$$

must
be
this!

$$SA = LA + 2B$$

(lateral sides areas) (Area of the Base)



Bases (2)

$$\begin{aligned} B1 \quad A &= b \cdot h \\ A &= 5 \cdot 10 \\ A &= 50 \end{aligned}$$

$$\begin{aligned} B2 \quad A &= b \cdot h \\ A &= 5 \cdot 10 \\ A &= 50 \end{aligned}$$

$$\begin{aligned} &\text{total } 50 + 50 \\ &100 \text{cm}^2 \end{aligned}$$

Lateral sides (4)

$$\begin{aligned} A: \quad A &= b \cdot h \\ A &= 15 \cdot 5 = 75 \text{cm}^2 \end{aligned}$$

$$\begin{aligned} B: \quad A &= b \cdot h \\ 15 \cdot 10 &= 150 \text{cm}^2 \end{aligned}$$

$$C: \text{ same as } A = 75 \text{cm}^2$$

$$D: \text{ same as } B = 150 \text{cm}^2$$

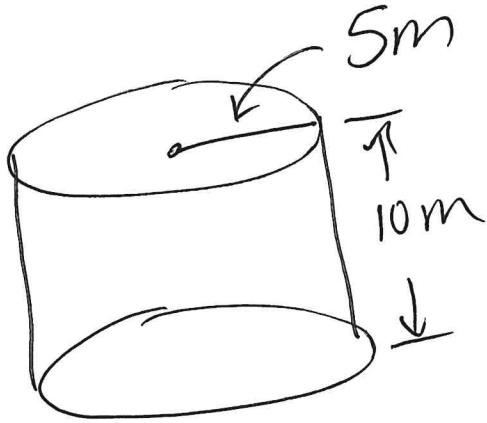
$$\text{total } 450 \text{cm}^2$$

Grand total

$$100 + 450 = 550 \text{cm}^2$$

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

ie 1



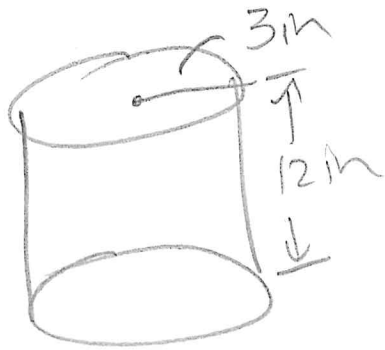
$$SA = 2\pi(5)(10) + 2\pi(5^2)$$

$$SA = 100\pi + 50\pi$$

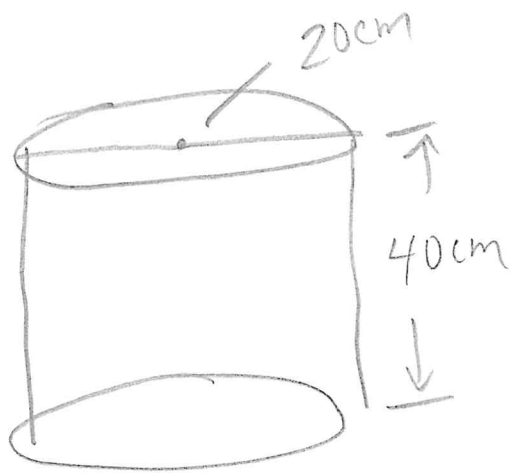
$$SA = 150\pi \text{ m}^2$$

HWK M3 Lesson 6
pgs. 36-37 #1-4

1.) Find the surface of the cylinder

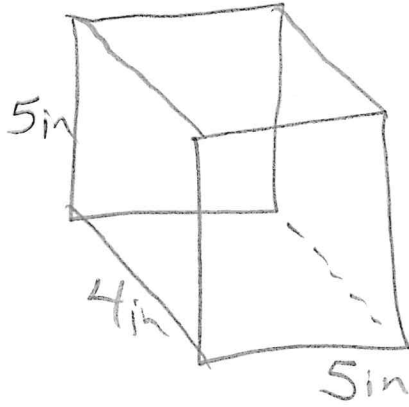


2.)



○ Find the SA of the prisms

3.)



○ 4.)

