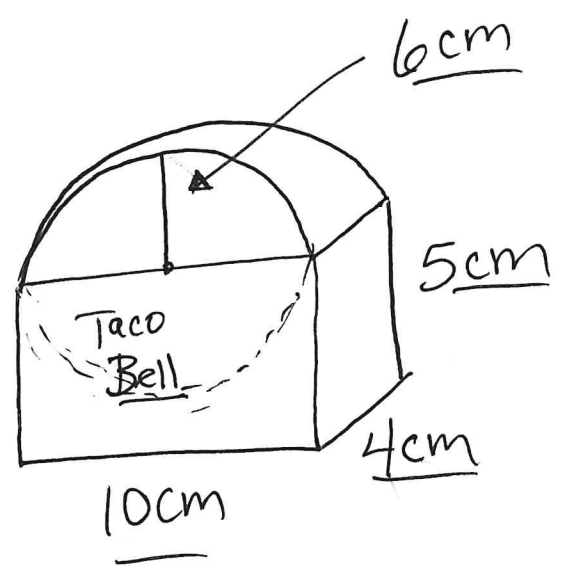


1/31/2022 : Lesson 14 M3

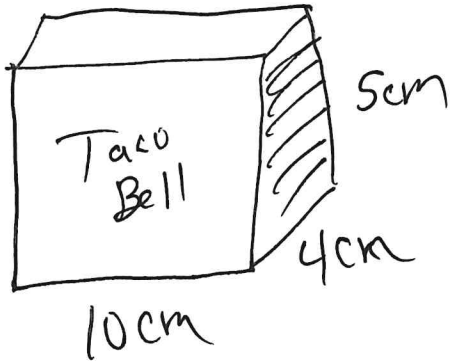
Surface Area & Volume of Mixed Shapes

ie1 Find surface area : Volume

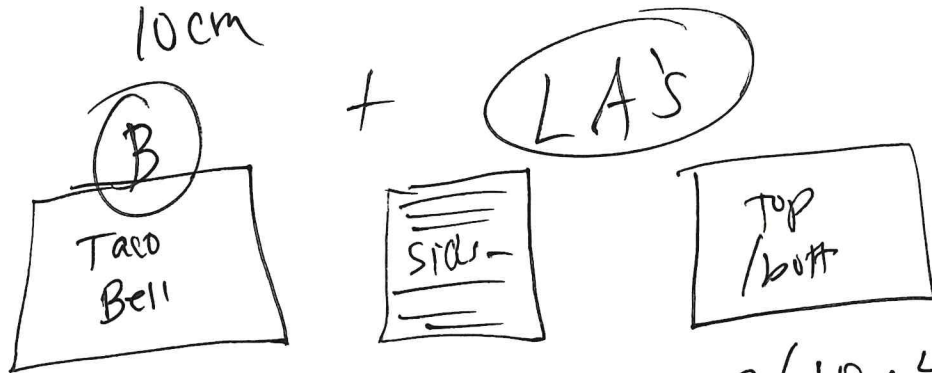


Taco Bell
Rectangular prism + curve top
~~1/2 cylinder~~ = total

Rectangular Prism



SA = Area of all sides add together



$$2(10 \cdot 5) + 2(5 \cdot 4) + 2(10 \cdot 4)$$

$$2(50) + 2(20) + 2(40)$$

$$100 + 40 + 80 =$$

$$220 \text{ cm}^2$$

Volume Rectangular prism

$$V = \frac{B \cdot h}{\cancel{h}}$$

$$V = (10 \cdot 4) \cdot 5$$

$$V = 200 \text{ cm}^3$$

Cylinder $\left(\frac{1}{2}\right)$

Remember this:!

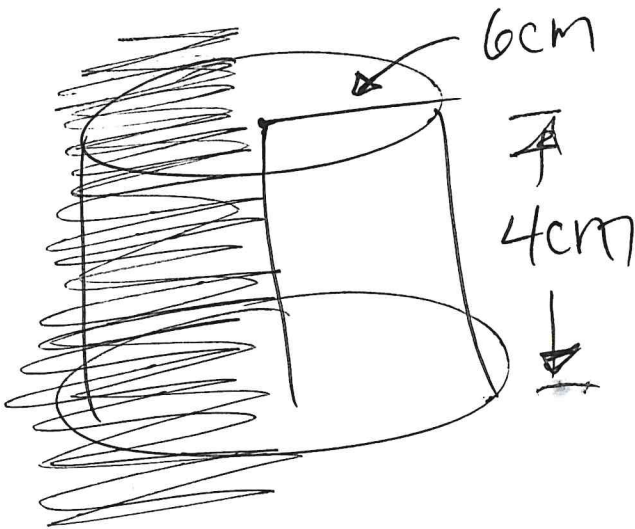
$$SA = 2\pi rh + 2\pi r^2$$

$$V = \pi r^2 h$$

$$V = \pi (6^2)(4)$$

$$V = \frac{144\pi \text{ cm}^3}{2} \leftarrow \frac{1}{2} \text{ cylinder}$$

$$V = 72\pi \text{ cm}^3$$



$$SA = 2\pi(6)(4) + 2\pi(6^2)$$

$$SA = 48\pi + 72\pi$$

$$SA = \frac{120\pi \text{ cm}^2}{2} \leftarrow \frac{1}{2} \text{ cylinder}$$

$$SA = \underline{\underline{60\pi \text{ cm}^2}}$$

$$\underline{SA} = \text{prism} + \text{cylinder} \left(\frac{1}{2}\right)$$

$$SA = 220 \text{ cm}^2 + \frac{60\pi \text{ cm}^2}{2 (60 \cdot 3.14)}$$

$$SA = \frac{220 + 188.4}{}$$

$$SA = 408.4 \text{ cm}^2$$

$$V = \text{prism} + \frac{1}{2} \text{ cylinder}$$

$$V = 200 \text{ cm}^3 + \frac{72\pi \text{ cm}^3}{2 (72 \cdot 3.14)}$$

$$V = 200 + 226.08$$

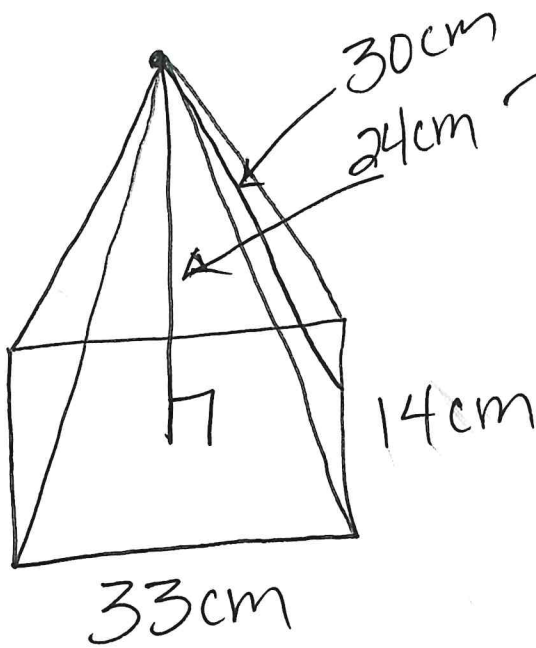
$$V = 426.08 \text{ cm}^3$$

2pts

Lesson 14 M3

pgs. 670-671
#1-2

1.)

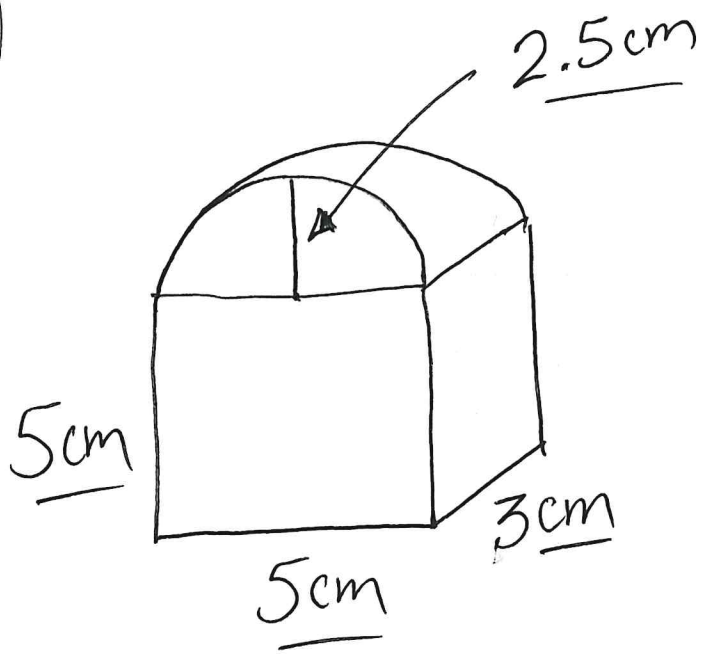


Rectangular
Pyramid

SA

V

2.)



SA

V