

5-21-18

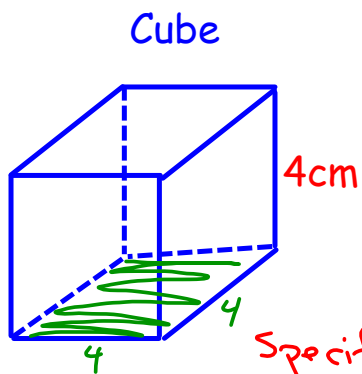
Aim: SWBAT find the surface area prisms and pyramids.

HW: Pg. 546 # 6 - 12

Pg. 550 # 2, 4, 8, 9, 10

Review Packet due May 29

Do Now:



Specific

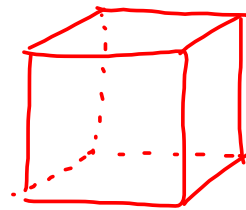
$$SA = 6s^2$$

$$SA = 6 \cdot 4^2$$

$$SA = 6 \cdot 16$$

$$SA = 96 \text{ cm}^2$$

OR



General

$$SA = 2B + Ph$$

$$SA = 2(4 \cdot 4) + (4+4+4+4)(4)$$

$$SA = 2 \cdot 16 + 16 \cdot 4$$

$$SA = 32 + 64$$

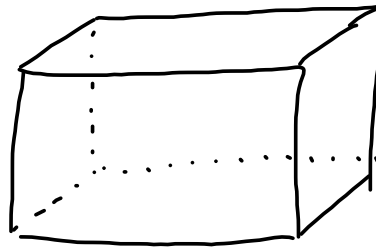
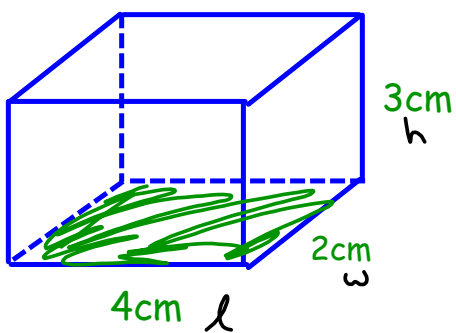
$$SA = 96 \text{ cm}^2$$

B = area of the base

P = perimeter of the base

h = height of the prism

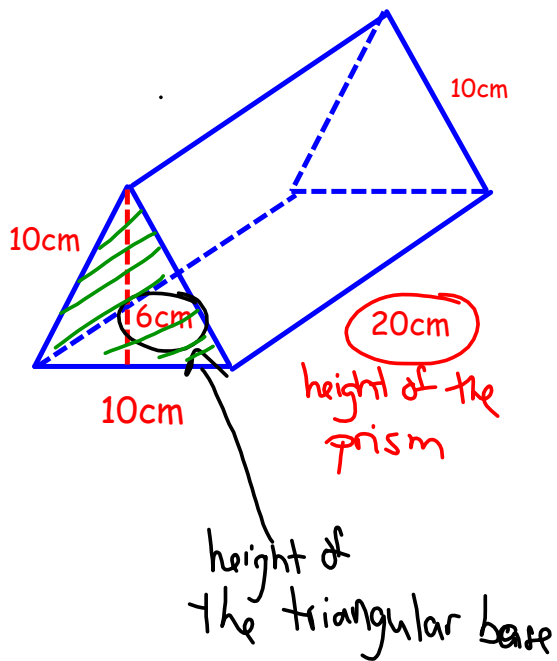
Rectangular Prism



$$\begin{aligned}
 & SA = 2wl + 2lh + 2wh \\
 1 \quad & SA = 2(2)(4) + 2(4)(3) + 2(2)(3) \\
 & SA = 16 + 24 + 12 \\
 & SA = 52 \text{ cm}^2
 \end{aligned}$$

$$\begin{aligned}
 \text{OR} \quad & SA = 2B + Ph \\
 & SA = 2(4 \cdot 2) + (4 + 4 + 2 + 2)(3) \\
 & SA = 16 + 12 \cdot 3 \\
 & SA = 16 + 36 \\
 & SA = 52 \text{ cm}^2
 \end{aligned}$$

Triangular Prism



$$SA = 2B + Ph$$

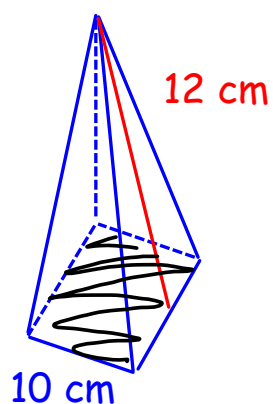
$$SA = 2\left(\frac{10 \cdot 6}{2}\right) + (10 + 10 + 10)(20)$$

$$SA = 60 + 30 \cdot 20$$

$$SA = 60 + 600$$

$$SA = 660 \text{ cm}^2$$

Square Pyramid



$$SA = B + \frac{1}{2}Pl$$
$$SA = (10 \cdot 10) + \frac{1}{2}(10 + 10 + 10 + 10)(12)$$
$$SA = 100 + \frac{1}{2}(40)(12)$$
$$SA = 100 + 240$$
$$SA = 340 \text{ cm}^2$$