

5-22-18

Aim: SWBAT find the volume of prisms and pyramids.

HW: Pg. 557 # 1 - 4, 13, 15

Pg. 563 # 5, 6, 8, 9, 11, 12

2-D & 3-D Assessment (Open notes) this week

Final Review Packet due Tuesday

Do Now: Check hw

Pg. 546 #6-12

⑥



$$SA = 6s^2$$

$$SA = 6 \cdot 10^2$$

$$SA = 6 \cdot 100$$

$$SA = 600 \text{ in.}^2$$

$$SA = 2B + Ph$$

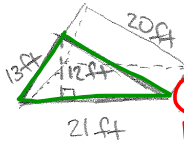
$$SA = 2(10 \cdot 10) + (10 + 10 + 10 + 10)(10)$$

$$SA = 2 \cdot 100 + 40 \cdot 10$$

$$SA = 200 + 400$$

$$SA = 600 \text{ in.}^2$$

⑦



$$SA = 2B + Ph$$

$$SA = 2\left(\frac{21 \cdot 12}{2}\right) + (12 + 21 + 20) \cdot 15$$

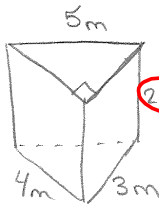
$$SA = 2 \cdot 126 + 54 \cdot 15$$

$$SA = 252 + 810$$

$$SA = 1062 \text{ ft}^2$$

height
of the
prism

⑧



$$SA = 2B + Ph$$

$$SA = 2\left(\frac{3 \cdot 4}{2}\right) + (3 + 4 + 5) \cdot 2$$

$$SA = 2 \cdot 6 + 12 \cdot 2$$

$$SA = 12 + 24$$

$$SA = 36 \text{ m}^2$$

height
of the
prism

⑨

$$SA = 2B + Ph$$

$$SA = 2 \cdot 4 + 8 \cdot 5$$

$$SA = 8 + 40$$

$$SA = 48 \text{ in.}^2$$

⑩

$$SA = 2B + Ph$$

$$SA = 2 \cdot 20 + 12 \cdot 3$$

$$SA = 40 + 36$$

$$SA = 76 \text{ cm}^2$$

⑪

$$SA = 2B + Ph$$

$$SA = 2 \cdot 45 + 30(2.8)$$

$$SA = 90 + 84$$

$$SA = 174 \text{ yd}^2$$

⑫

$$SA = 2B + Ph$$

$$SA = 2(9 \cdot 3) + 16(0.5)$$

$$SA = 38.6 + 8$$

$$SA = 46.6 \text{ m}^2$$

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

$$\begin{aligned} \textcircled{2} \quad SA &= B + \frac{1}{2}Pl \\ SA &= (15 \cdot 15) + \frac{1}{2}(15+15+15+15)(11) \\ SA &= 225 + (\frac{1}{2})(60)(11) \\ SA &= 225 + 330 \\ SA &= 555 \text{ m}^2 \end{aligned}$$

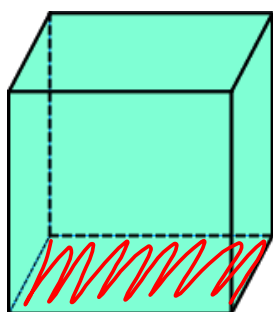
$$\begin{aligned} \textcircled{4} \quad SA &= B + \frac{1}{2}Pl \\ SA &= (1.5 \cdot 1.5) + (\frac{1}{2})(1.5+1.5+1.5+1.5)(1.5) \\ SA &= 2.25 + (\frac{1}{2})(6)(1.5) \\ SA &= 2.25 + 4.5 \\ SA &= 6.75 \text{ mm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad SA &= B + \frac{1}{2}Pl \\ SA &= (7 \cdot 7) + (\frac{1}{2})(7+7+7+7)(5) \\ SA &= 49 + (\frac{1}{2})(28)(5) \\ SA &= 49 + 70 \\ SA &= 119 \quad \textcircled{C} \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad SA &= B + \frac{1}{2}Pl \\ SA &= (5 \cdot 5) + (\frac{1}{2})(5+5+5+5)(4.2) \\ SA &= 25 + (\frac{1}{2})(20)(4.2) \\ SA &= 25 + 42 \\ SA &= 67 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad SA &= B + \frac{1}{2}Pl \\ SA &= (15 \cdot 15) + \frac{1}{2}(15+15+15+15)(10) \\ SA &= 225 + \frac{1}{2}(60)(10) \\ SA &= 225 + 300 \\ SA &= 525 \text{ yd}^2 \end{aligned}$$

Cube



7cm

$$V = s^3$$

$$V = 7^3$$

$$V = 343 \text{ cm}^3$$

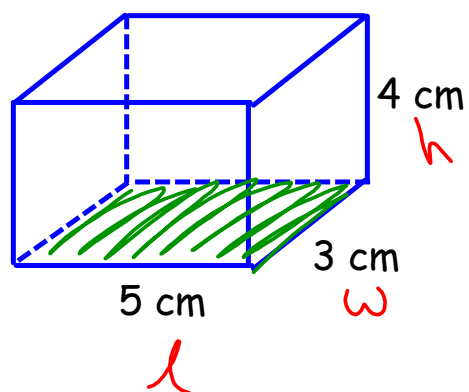
B = the area of the base
 h = the height of the prism

$$V = Bh$$

$$V = (7 \cdot 7) \cdot 7$$

$$V = 343 \text{ cm}^3$$

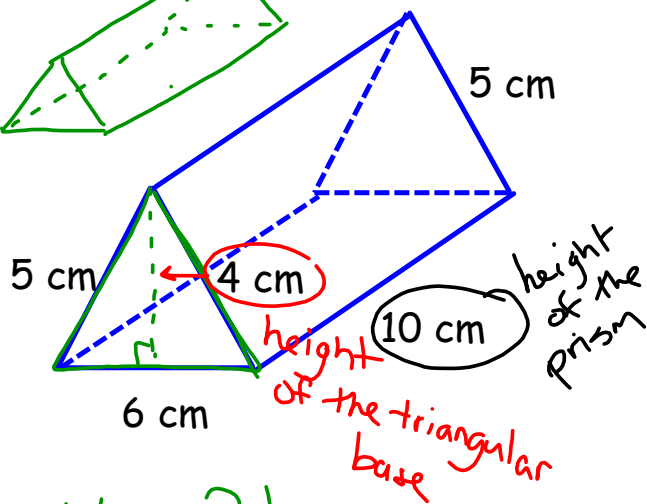
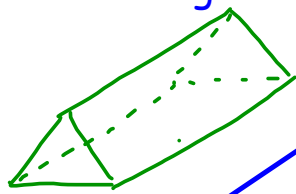
Rectangular Prism



$$\begin{aligned}V &= lwh \\V &= 5 \cdot 3 \cdot 4 \\V &= 60 \text{ cm}^3\end{aligned}$$

$$\begin{aligned}V &= Bh \\V &= (5 \cdot 3) \cdot 4 \\V &= 60 \text{ cm}^3\end{aligned}$$

Triangular Prism

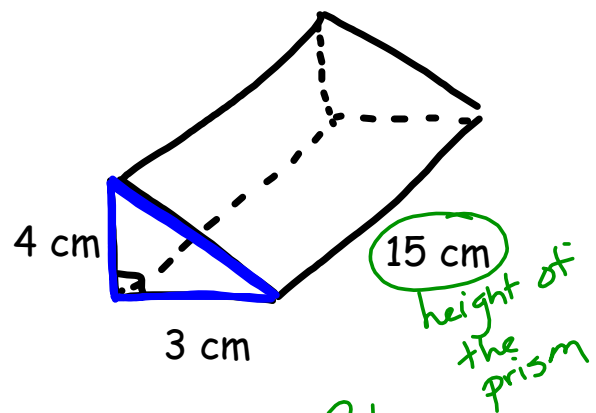


$$V = Bh$$

$$V = \left(\frac{6 \cdot 4}{2}\right) \cdot 10$$

$$V = 12 \cdot 10$$

$$V = 120 \text{ cm}^3$$



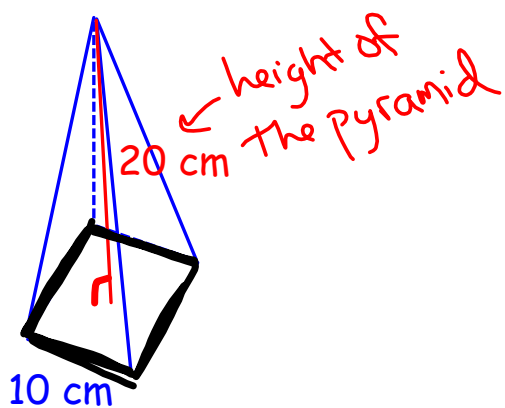
$$V = Bh$$

$$V = \left(\frac{3 \cdot 4}{2}\right) \cdot 15$$

$$V = 6 \cdot 15$$

$$V = 90 \text{ cm}^3$$

Square Pyramid



$$V = \frac{1}{3} Bh$$

$$V = \frac{1}{3}(10 \cdot 10) \cdot 20$$

$$V = 666 \frac{2}{3} \text{ cm}^3$$