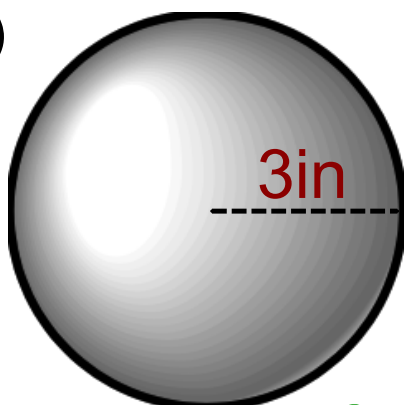


~~HW: pg. 375-377/1, 2, 5-8, 22~~

Warm up:

Find the surface area and volume.

1)



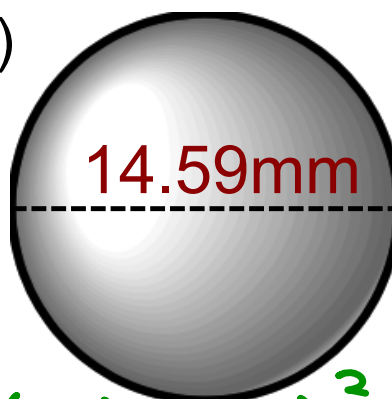
$$SA) 4(3.14)(3)^2$$

$$113.04 \text{ in}^2$$

$$V) \frac{4}{3}(3.14)(3)^3$$

$$113.04 \text{ in}^3$$

2)



$$SA) 4(3.14)(7.295)^2$$

$$668.41 \text{ mm}^2$$

$$V) \frac{4}{3}(3.14)(7.295)^3$$

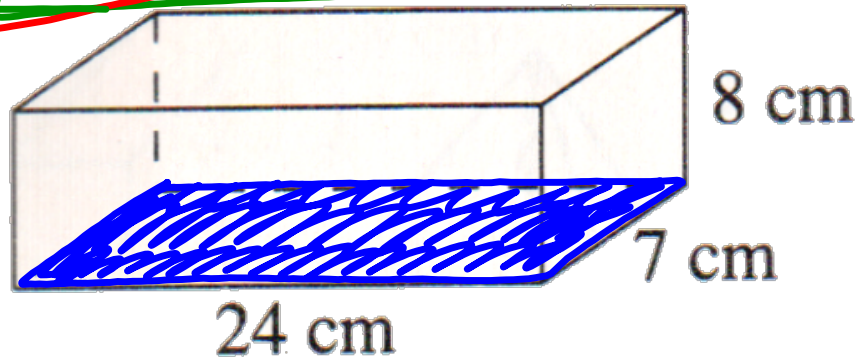
$$1625.34 \text{ mm}^3$$

What is volume?

Find the volume.  $V = lwh = 24 \cdot 7 \cdot 8 = 1344 \text{ cm}^3$

$$V(\text{prism}) = Bh$$

Area  
of  
the  
base



Find the volume.

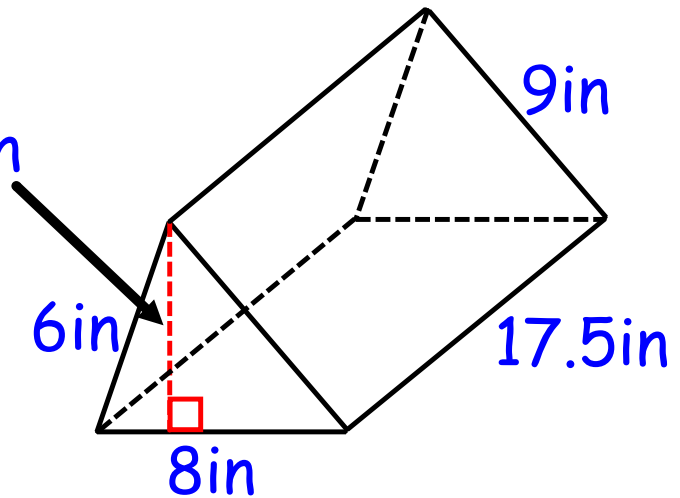
$$V(\text{prism}) = Bh$$

$$A(\text{triangle}) = \frac{1}{2}bh$$

$$\frac{1}{2} \cdot 8 \cdot 7 = 17.5$$

$$B \quad h$$

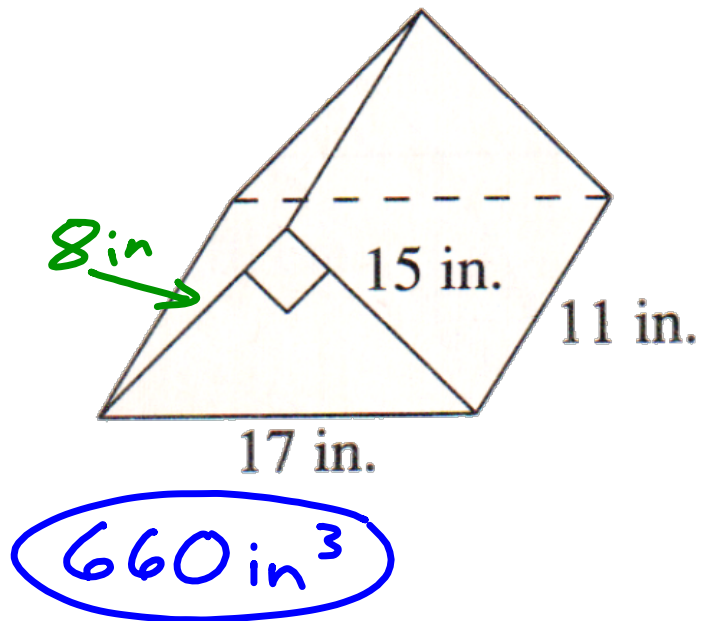
$$490 \text{ in}^3$$



Find the volume.

$$\begin{array}{r}
 15^2 + b^2 = 17^2 \\
 225 + b^2 = 289 \\
 \underline{-225} \quad \quad \underline{-225} \\
 \hline
 \sqrt{b^2} = \sqrt{64} \\
 b = 8
 \end{array}$$

$$\frac{\frac{1}{2} \cdot 8 \cdot 15}{B} \cdot \frac{11}{h}$$



$$660 \text{ in}^3$$

HW Solutions

③



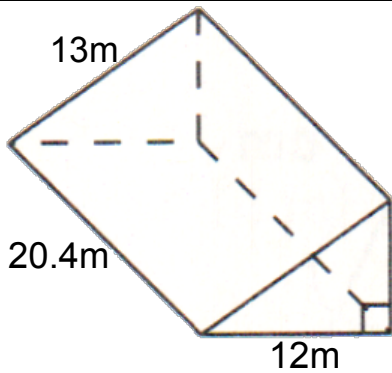
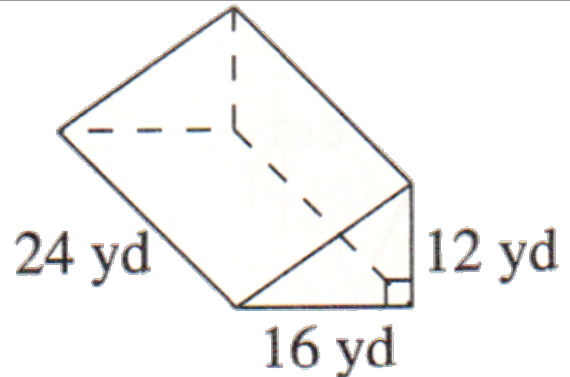
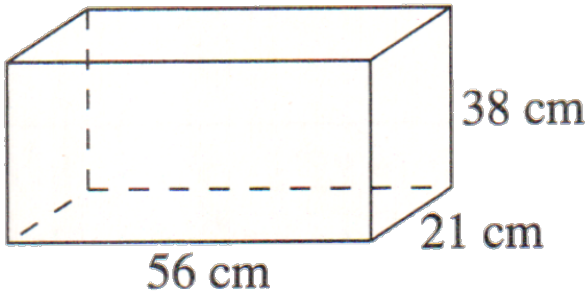
$$\frac{4}{3}(3.14)(0.5)^3$$

$$0.52333\bar{3}$$

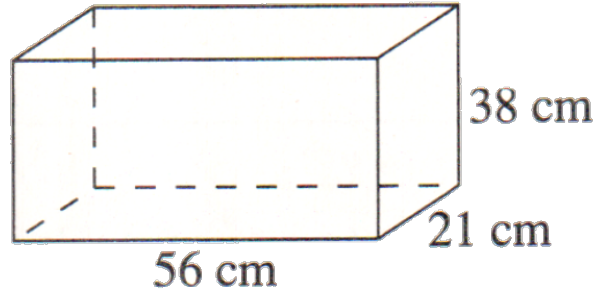
$$0.5 \text{ cm}^3$$

④

$$\frac{4}{3}(3.14)(7.5)^3 = 1766.25 \text{ in}^3$$



Suppose you want to buy concrete for a 36 ft by 24 ft by 9 in. patio. If concrete costs  $\$55/\text{yd}^3$ , how much will the concrete for the patio cost?



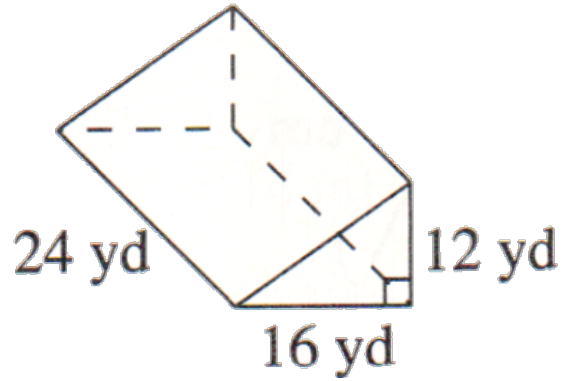
$$56 \cdot 21 \cdot 38$$

$$44688 \text{ cm}^3$$



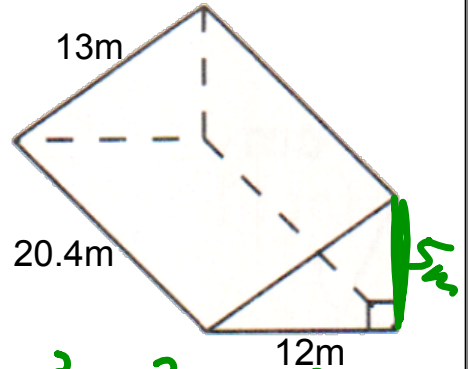
$$\frac{1}{2} \cdot 16 \cdot 12 \cdot 24$$

$$2304 \text{ yd}^3$$



$$\frac{1}{2} \cdot 12 \cdot 5 \cdot 20.4$$

$$612 \text{ m}^3$$



$$12^2 + x^2 = 13^2$$

$$144 + x^2 = 169$$

$$-144 \quad -144$$


---


$$x^2 = 25$$

$$x = 5$$

Suppose you want to buy concrete for a 36 ft by 24 ft by 9 in. patio. If concrete costs \$55/yd<sup>3</sup>, how much will the concrete for the patio cost?

$$12 \text{ yd} \times 8 \text{ yd} \times \frac{9}{36}$$

$$12 \cdot 8 \cdot 0.25$$

$$24 \text{ yd}^3 \times 55 = \$1320$$

