M7H

APRIL 10, 2012

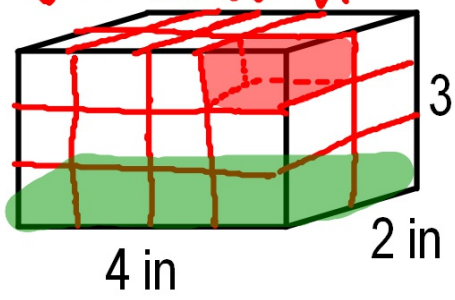
GET OUT YOUR HOMEWORK TO CORRECT...

4/10 - Volume of Prisms and Pyramids

PRISMS:

Volume = Area of the base x height

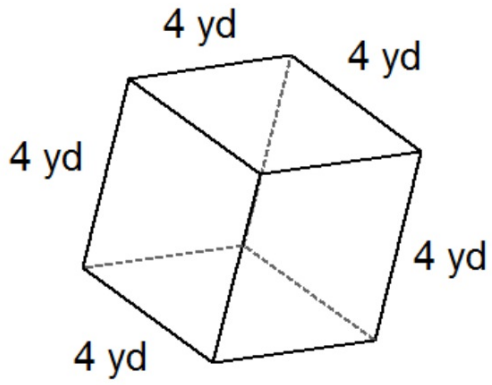
$V = L \cdot W \cdot H$



$A = LW$

24 cubes

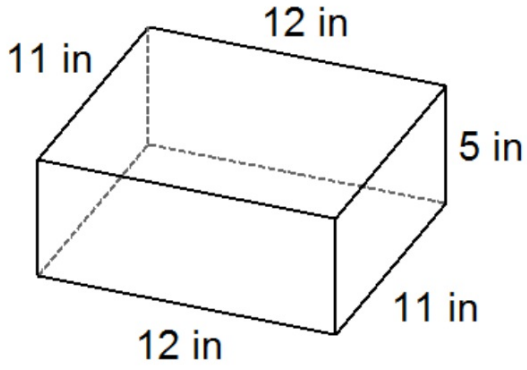
24 in^3



$V = LWH$

$= 4 \cdot 4 \cdot 4$

$= 64 \text{ yd}^3$

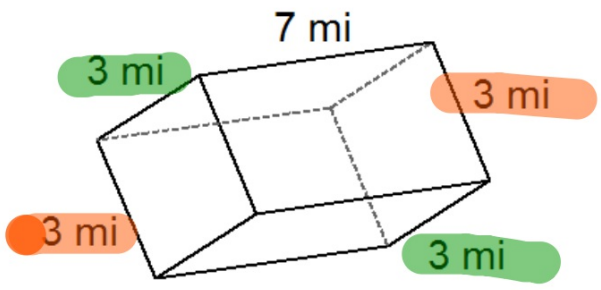


$V = LWH$

$= 5 \cdot 12 \cdot 11$

$= 60 \cdot 11$

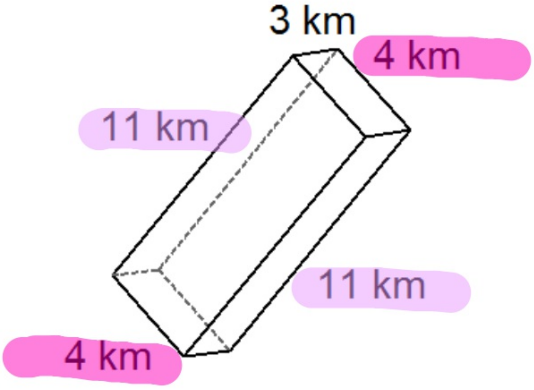
$= 660 \text{ in}^3$



$V = LWH$

$= 3 \cdot 3 \cdot 7$

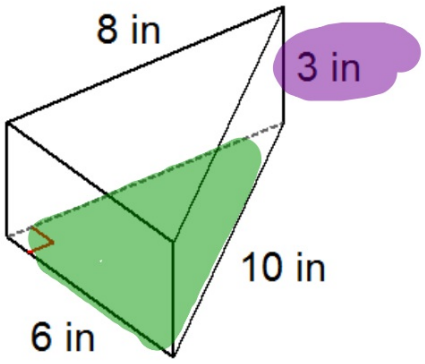
$= 63 \text{ mi}^3$



$V = LWH$

$= 11 \cdot 4 \cdot 3$

$= 132 \text{ km}^3$

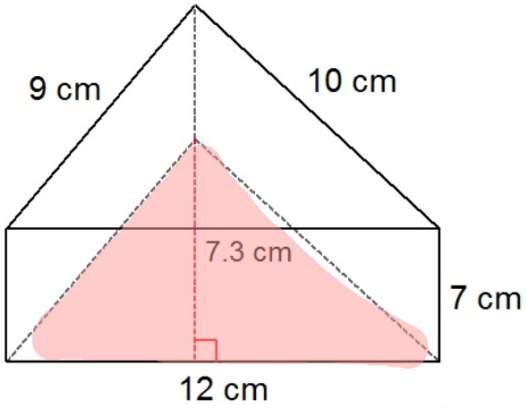


V = area of base × height

$= \frac{1}{2}bh \times H$

$= \frac{1}{2} \cdot 6 \cdot 8 \times 3$

$= 72 \text{ in}^3$



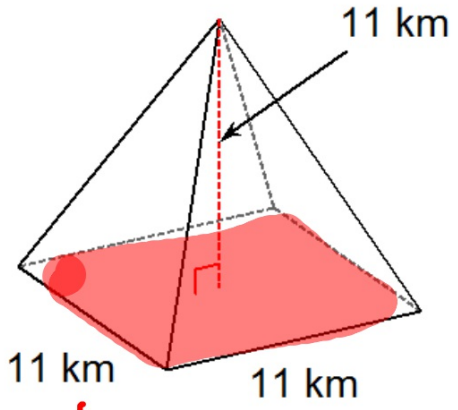
$V = \frac{1}{2}bh \times H$

$= \frac{1}{2}(12)(7.3) \times 7$

$= 306.6 \text{ cm}^3$

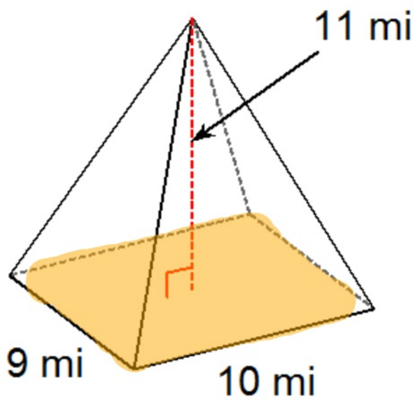
PYRAMIDS:

Volume = one-third of the area of the base x height

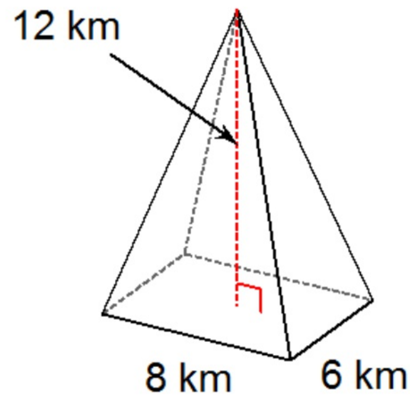


$$V = \frac{1}{3} \cdot 11 \cdot 11 \cdot 11$$

$$= 443.7 \text{ km}^3$$



$$\begin{array}{r} 32 \\ \times\ 6 \\ \hline 192 \end{array}$$



$V = \frac{1}{3} LW \cdot H$

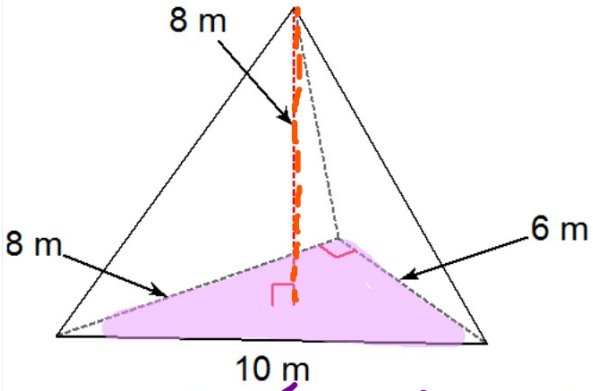
$= \frac{1}{\cancel{3}} \cdot 10 \cdot \cancel{9}^{3} \cdot 11$

$= 330 \text{ mi}^3$

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

$= \frac{1}{\cancel{3}} \cdot 8 \cdot 6 \cdot \cancel{12}^{4}$

$= 192 \text{ km}^3$

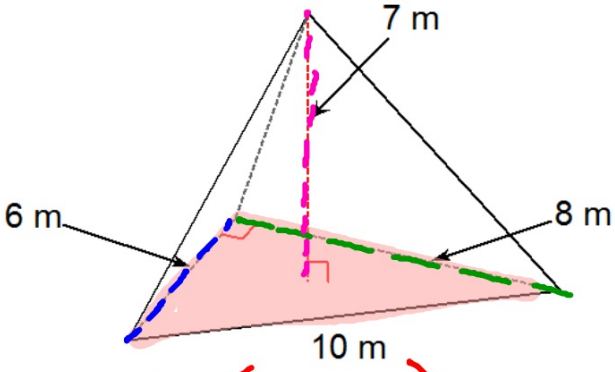


$V = \frac{1}{3}\left(\frac{1}{2}bh\right) \times H$

$= \frac{1}{3}\left(\frac{1}{2} \cdot 6 \cdot 8\right) \times 8$

$= \frac{1}{3} \cdot 24 \cdot 8$

$= 64\ m^3$



$V = \frac{1}{3}\left(\frac{1}{2}bh\right) \times H$

$= \frac{1}{3}\left(\frac{1}{2} \cdot 8 \cdot 6\right) \times 7$

$= \frac{1}{3} \cdot 24 \cdot 7$

$= 8 \cdot 7$

$= 56\ m^3$

HOMEWORK

GEOMETRY WS 5

DUE Wednesday