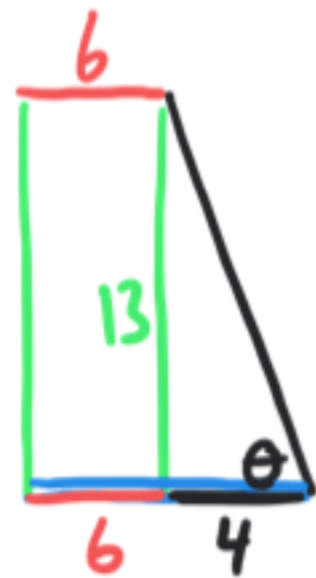
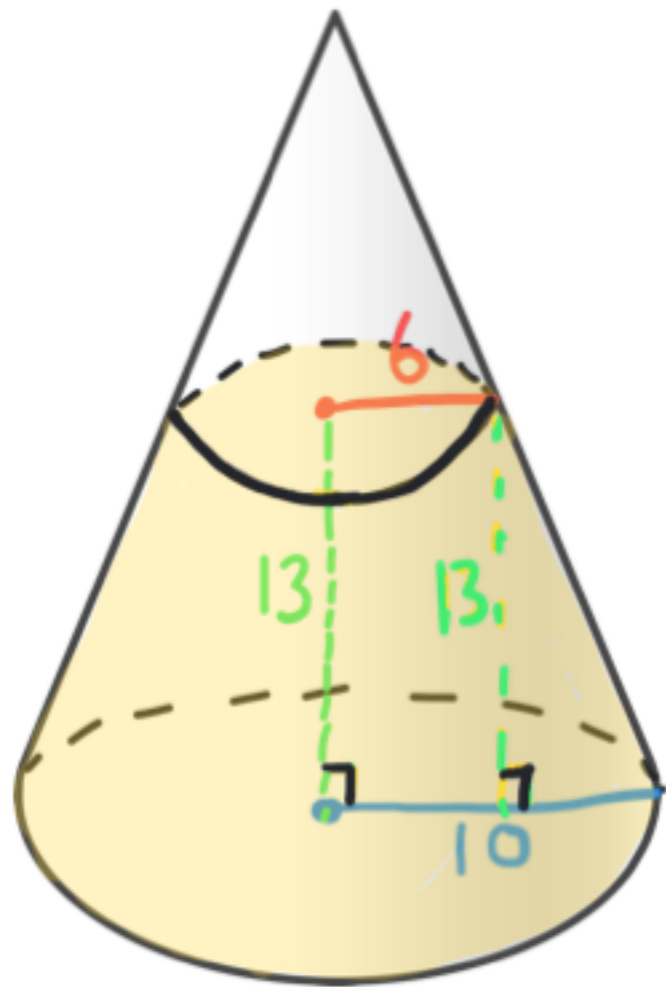


## Volume of a Truncated Cone (Frustum)

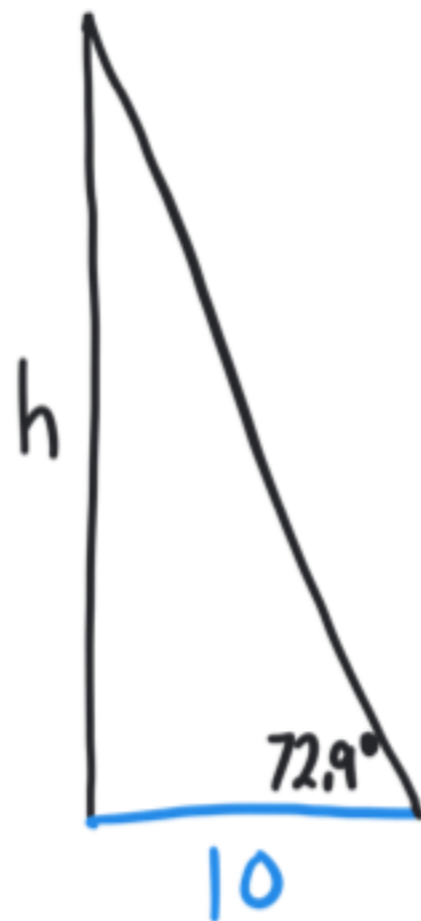


$$10 - 6 = 4$$

$$\tan \theta = \frac{13}{4}$$

$$\theta = \tan^{-1}\left(\frac{13}{4}\right)$$

$$\theta = 72.9^\circ$$

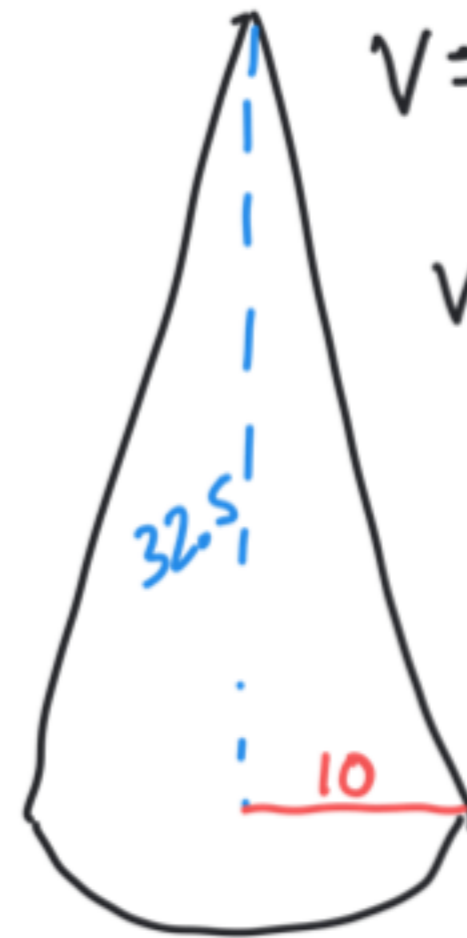


$$10 \cdot \tan 72.9^\circ = \frac{h \cdot 10}{10}$$

$$h = 10 \tan 72.9^\circ$$

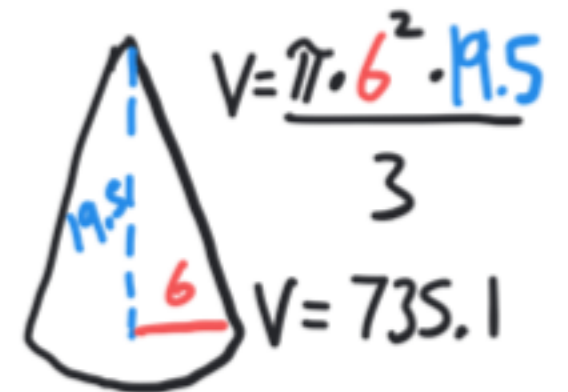
$$h = 32.5$$

$$32.5 - 13 = 19.5$$



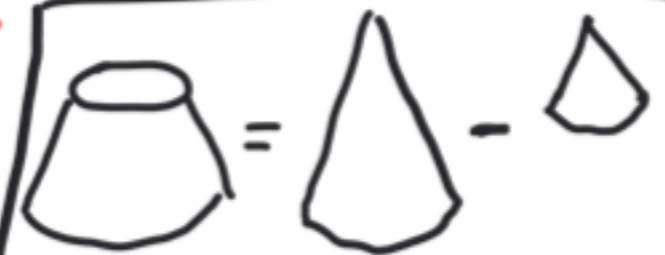
$$V = \frac{\pi \cdot 10^2 \cdot 32.5}{3}$$

$$V = 3403.4$$



$$V = \frac{\pi \cdot 6^2 \cdot 19.5}{3}$$

$$V = 735.1$$



$$V = 3403.4 - 735.1$$

$$V = 2668.3 \text{ u}^3$$