

Name Key

Mrs. Roubos

Date _____

8A Period _____

Do Now

The formula for the volume of a cone is $V = \frac{1}{3}\pi r^2 h$. The radius, r , of the cone may be expressed as

(1) $\sqrt{\frac{3V}{\pi h}}$

(3) $3\sqrt{\frac{V}{\pi h}}$

(2) $\sqrt{\frac{V}{3\pi h}}$

(4) $\frac{1}{3}\sqrt{\frac{V}{\pi h}}$

(3) $V = \frac{1}{3}\pi r^2 h$

$$\frac{3V}{\pi h} = \frac{\pi r^2 h}{\pi h}$$

$$\sqrt{r^2} = \sqrt{\frac{3V}{\pi h}}$$

$$r = \sqrt{\frac{3V}{\pi h}}$$