

Do-now:

What is the lateral area of a cylinder with a radius of 6 inches and a height of 8 inches?

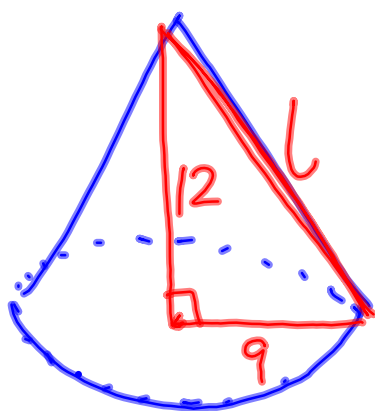
$$L = 2\pi rh$$

$$L = 2\pi \cdot 6 \cdot 8$$

$$L = 2\pi \cdot 48$$

$$L = 96\pi \text{ in}^2$$

The vertical height of a cone is 12 inches and the radius is 9 inches.
What is the lateral area of the cone?



$$9^2 + 12^2 = l^2$$

$$81 + 144 = l^2$$

$$225 = l^2$$

$$15 = l$$

$$L = \pi r l$$

$$L = \pi \cdot 9 \cdot 15$$

$$L = \pi \cdot 135$$

$$L = 135\pi \text{ m}^2$$

The surface area of a sphere is 576π square inches. What is the length of the radius?

$$SA = 4\pi r^2$$

$$\frac{576\pi}{4} = \frac{4\pi r^2}{4}$$

$$\frac{144\pi}{\pi} = \frac{\pi r^2}{\pi}$$

$$\sqrt{144} = \sqrt{r^2}$$

$$12 = r$$

$$r = 12 \text{ inches}$$

π

ROUNDING

vs.

EXACT ANSWER

You will be
told to round!

5.16432419....

5.2

5.16

If no instructions
on what to
do w/ answer,
leave in terms
of π.

π comes after #!