## Inspiring Greatioss <br> Math Virtual Learning <br> Geometry/Honors Geometry

May 1, 2020

## Geometry/Honors Geometry Lesson: May 1, 2020

Objective/Learning Target:
Find the volume of cones

Bell Ringer: Find the volume of the cylinder.


Bell Ringer Answer: 2500 $\pi$ cubic centimeters

Let's Get Started: Go through the following slides and try the example problems.

## DEFINITIONS:

Cone: Solid with one circular base.

Volume: Number of cubic units that can fit in a solid.


## Volume of a Cone:

$$
V=1 / 3 \pi r^{2} H
$$

$$
\pi=\mathrm{pi}
$$

$r=$ radius of the base
$H$ = height of the cone


Example Problem: Find the volume of the cone.
$V=1 / 3 \pi r^{2} H$
$V=1 / 3 \pi(4)^{2}(7)$
$V=1 / 3 \pi(16)(7)$
$V=1 / 3 \pi(112)$
$\mathrm{V}=37.3 \pi$ cubic yards

$$
\begin{aligned}
& r=\text { radius of the base } \\
& r=4 \text { yards }
\end{aligned}
$$

7 yd
$\mathrm{H}=$ height of the cone
H = 7 yards

Try the next practice problems on your own! Find the volume of each cone.

1) 7 m

2) 


3)


## Answer Key:

Here you will find the answers to the previous four questions. Check your answers below.

1) $392 \pi$ cubic meters
2) $294 \pi$ cubic units
3) $10.6 \pi$ cubic inches
4) $324 \pi$ cubic feet

## Additional Resources:

Click on the link below to get additional practice and to check your understanding!

## Volume of Cones Practice

