

Math Virtual Learning



April 23, 2020



Geometry Lesson: April 23, 2020

Objective/Learning Target: Calculate the surface area of cones



Bell Ringer: Find the surface area of the pyramid.





Bell Ringer Answer: 105 square centimeters

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



DEFINITIONS:

Cone: Solid with one circular base.

Surface Area: Sum of the area of each face of the solid.



Surface Area of a Cone:

$$SA = \pi r^2 + \pi r \ell$$

π = pi

r = radius of the base

t = slant height





Example Problem: Find the surface area of the cone.

 $SA = \pi r^2 + \pi r \ell$

SA =
$$\pi$$
(7)² + π (7)(15)

 $SA = 49\pi + 105\pi$

SA = 154π square inches



r = radius of the base	l = slant height of the cone
r = 7 inches	ℓ = 15 inches



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





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

- 1) 224 π square meters
- 2) 144 π square meters
- 3) 44 π square inches
- 4) 216 π square feet



Additional Resources:

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

Surface Area of Cones Practice