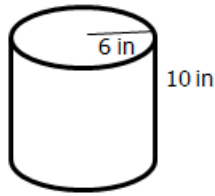


## Possible Solutions

The radius of the cylinder shown below is 6 in and the height is 10 in.



Mrs. Smith took a cone with the same radius and the same height as the cylinder.

Which of the following is true about the relationship?

- a) It takes the volume of two cones to fill the cylinder.
  - b) It takes the volume of three cones to fill the cylinder.
  - c) It takes the volume of three cylinders to fill the cone.
  - d) There is no relationship between the two figures.
- 
- The formula to find the volume of a cylinder is  $V = Bh$ , whereas the formula for a cone with the same base is  $V = \frac{1}{3}Bh$ .
  - The volume of a cone is one-third the volume of a cylinder, meaning it would take the volume of three cones to fill the cylinder so the answer is b) It takes the volume of three cones to fill the cylinder.