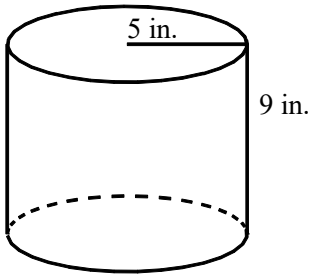
NAME:_____

1. Find the volume of the cylinder. (not drawn to scale)



[A] 54π in.^{3} [B] 225π in.^{2}

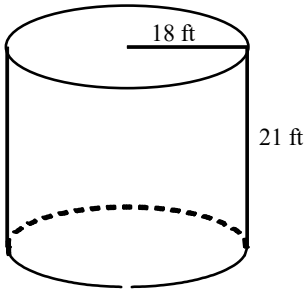
[C] 45π in.^{3} [D] 225π in.^{3}

2. Cylinder *A* has radius 1 and height 4 and cylinder *B* has radius 2 and height 4. The ratio of the volumes of the two cylinders is

[A] 1:4 [B] 1:2 [C] 1:1

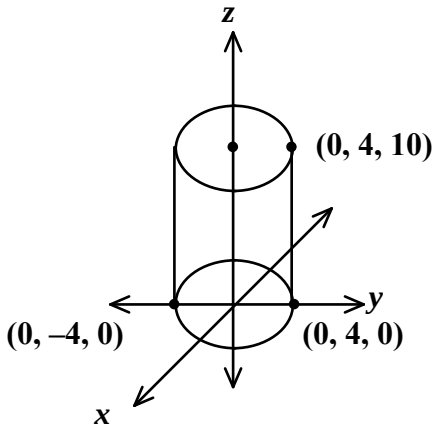
[D] 5:6 [E] cannot be determined

3. Find the volume of the cylinder. Use 3.14 for π.



4. What is the volume of a can of soup that has a height of 16 cm and a diameter of 8 cm?

5. Find the volume of the cylinder shown. Leave your answer in terms of π.



6. The formula for the volume of a cylinder is $V = \pi r^2 h$. Write an expression for the volume of a cylinder in which $r = 6x^4$. Use 3.14 for π.

[1] D

[2] A

[3] $21{,}364.56\ \text{ft}^3$

[4] $803.84\ \text{cm}^3$

[5] 160π cu units

[6] $113.04x^8h$