## Area and Volume of Cylinders (A)

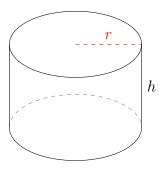
Calculate the surface area and volume for each cylinder.

Surface Area = 
$$(\pi r^2 \times 2) + (\pi d \times h)$$
 Volume =  $\pi r^2 \times h$ 

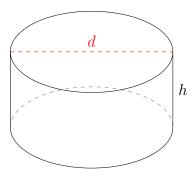
$$Volume = \pi r^2 \times h$$

$$d = 2r$$

1.



2.



$$r = 1.75 \text{ in}$$
  $h = 2.2 \text{ in}$ 

 $Surface\ Area =$ 

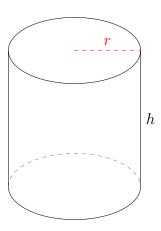
Volume =

d = 4.3 nm h = 2 nm

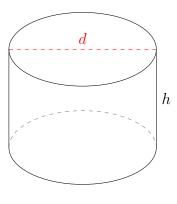
Surface Area =

Volume =

3.



4.



$$r = 1.75 \text{ cm}$$
  $h = 3.6 \text{ cm}$ 

Surface Area =

Volume =

d = 3.9 nmh = 2.6 nm

Surface Area =

Volume =

## Area and Volume of Cylinders (A) Answers

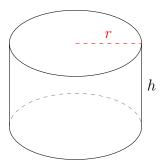
Calculate the surface area and volume for each cylinder.

Surface Area = 
$$(\pi r^2 \times 2) + (\pi d \times h)$$
 Volume =  $\pi r^2 \times h$ 

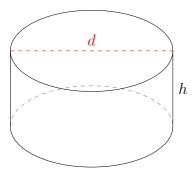
$$Volume = \pi r^2 \times h$$

$$d = 2r$$

1.



2.



$$r = 1.75 \text{ in}$$
  $h = 2.2 \text{ in}$ 

Surface Area = 
$$43.43 \text{ in}^2$$

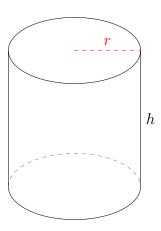
$$Volume = 21.17 in^3$$

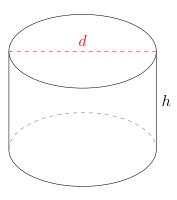
d = 4.3 nm h = 2 nm

Surface Area = 
$$56.06 \text{ nm}^2$$

$$Volume = 29.04 \text{ nm}^3$$

3.





$$r = 1.75 \text{ cm}$$
  $h = 3.6 \text{ cm}$ 

Surface Area = 
$$58.83 \text{ cm}^2$$

$$Volume = 34.64 \text{ cm}^3$$

$$d = 3.9 \text{ nm}$$
  $h = 2.6 \text{ nm}$ 

$$h = 2.6 \text{ nm}$$

Surface Area = 
$$55.75 \text{ nm}^2$$

$$Volume = 31.06 \text{ nm}^3$$