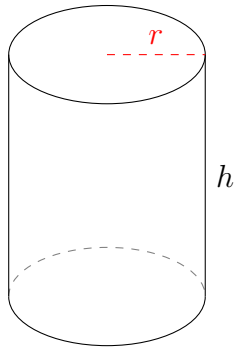


Area and Volume of Cylinders (B)

Calculate the surface area and volume for each cylinder.

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

1.

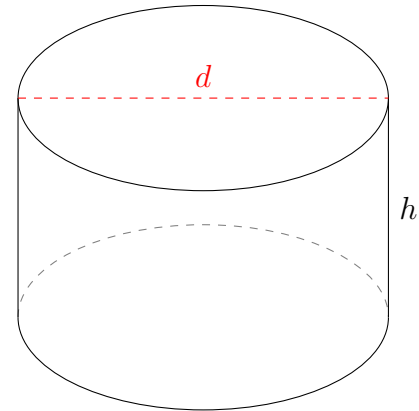


$$r = 1.3 \text{ AU} \quad h = 3.2 \text{ AU}$$

Surface Area =

Volume =

2.

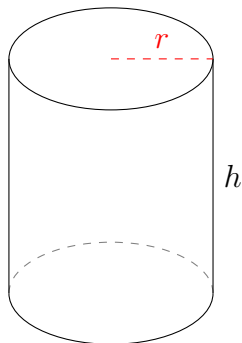


$$d = 4.9 \text{ yd} \quad h = 2.9 \text{ yd}$$

Surface Area =

Volume =

3.

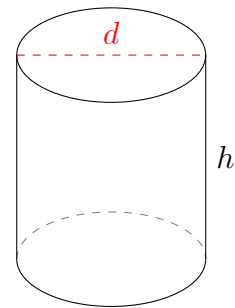


$$r = 1.35 \text{ yd} \quad h = 3.1 \text{ yd}$$

Surface Area =

Volume =

4.



$$d = 2.5 \text{ in} \quad h = 2.7 \text{ in}$$

Surface Area =

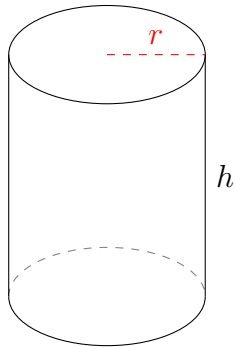
Volume =

Area and Volume of Cylinders (B) Answers

Calculate the surface area and volume for each cylinder.

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

1.

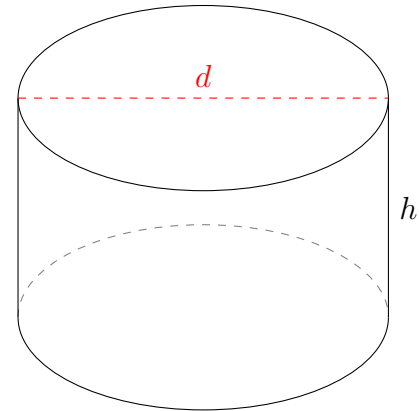


$$r = 1.3 \text{ AU} \quad h = 3.2 \text{ AU}$$

$$\text{Surface Area} = 36.76 \text{ AU}^2$$

$$\text{Volume} = 16.99 \text{ AU}^3$$

2.

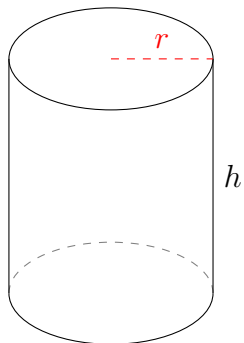


$$d = 4.9 \text{ yd} \quad h = 2.9 \text{ yd}$$

$$\text{Surface Area} = 82.36 \text{ yd}^2$$

$$\text{Volume} = 54.69 \text{ yd}^3$$

3.

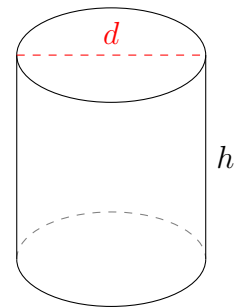


$$r = 1.35 \text{ yd} \quad h = 3.1 \text{ yd}$$

$$\text{Surface Area} = 37.75 \text{ yd}^2$$

$$\text{Volume} = 17.75 \text{ yd}^3$$

4.



$$d = 2.5 \text{ in} \quad h = 2.7 \text{ in}$$

$$\text{Surface Area} = 31.02 \text{ in}^2$$

$$\text{Volume} = 13.25 \text{ in}^3$$