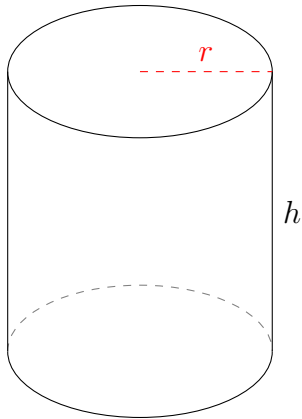


Area and Volume of Cylinders (H)

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.

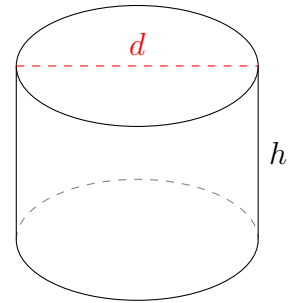


$$r = 1.75 \text{ mi} \quad h = 3.7 \text{ mi}$$

Surface Area =

Volume =

2.

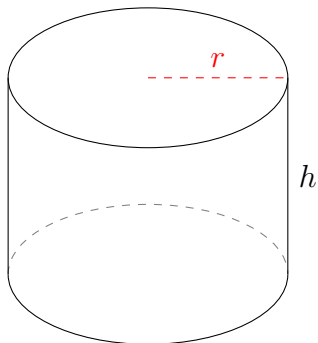


$$d = 3.2 \text{ nm} \quad h = 2.3 \text{ nm}$$

Surface Area =

Volume =

3.

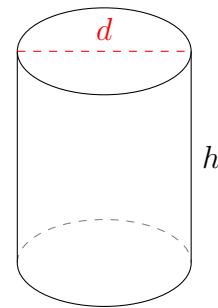


$$r = 1.85 \text{ ft} \quad h = 2.6 \text{ ft}$$

Surface Area =

Volume =

4.



$$d = 2.3 \text{ nm} \quad h = 2.8 \text{ nm}$$

Surface Area =

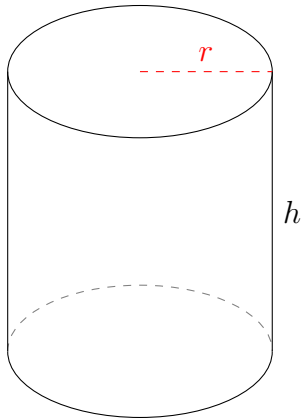
Volume =

Area and Volume of Cylinders (H) 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.

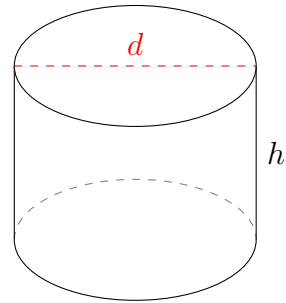


$$r = 1.75 \text{ mi} \quad h = 3.7 \text{ mi}$$

$$\text{Surface Area} = 59.93 \text{ mi}^2$$

$$\text{Volume} = 35.6 \text{ mi}^3$$

2.

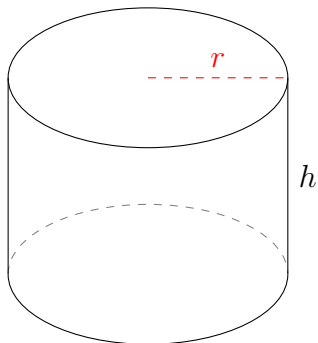


$$d = 3.2 \text{ nm} \quad h = 2.3 \text{ nm}$$

$$\text{Surface Area} = 39.21 \text{ nm}^2$$

$$\text{Volume} = 18.5 \text{ nm}^3$$

3.

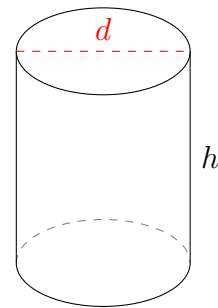


$$r = 1.85 \text{ ft} \quad h = 2.6 \text{ ft}$$

$$\text{Surface Area} = 51.73 \text{ ft}^2$$

$$\text{Volume} = 27.96 \text{ ft}^3$$

4.



$$d = 2.3 \text{ nm} \quad h = 2.8 \text{ nm}$$

$$\text{Surface Area} = 28.54 \text{ nm}^2$$

$$\text{Volume} = 11.63 \text{ nm}^3$$