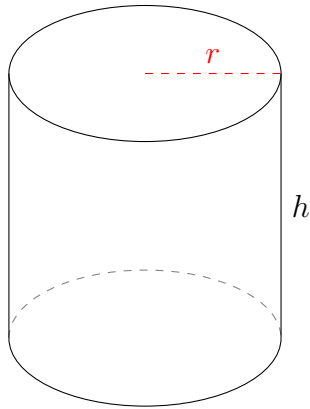


Area and Volume of Cylinders (F)

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.

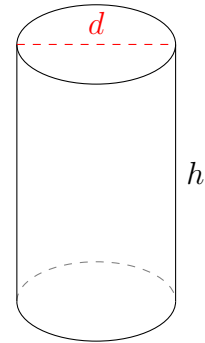


$$r = 1.8 \text{ cm} \quad h = 3.5 \text{ cm}$$

Surface Area =

Volume =

2.

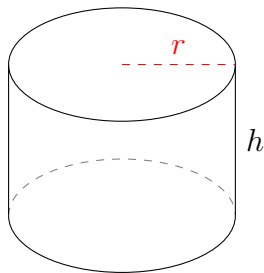


$$d = 2.1 \text{ AU} \quad h = 3.4 \text{ AU}$$

Surface Area =

Volume =

3.

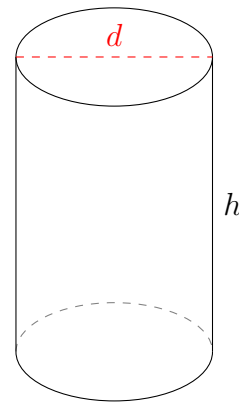


$$r = 1.5 \text{ mi} \quad h = 2 \text{ mi}$$

Surface Area =

Volume =

4.



$$d = 2.6 \text{ cm} \quad h = 3.9 \text{ cm}$$

Surface Area =

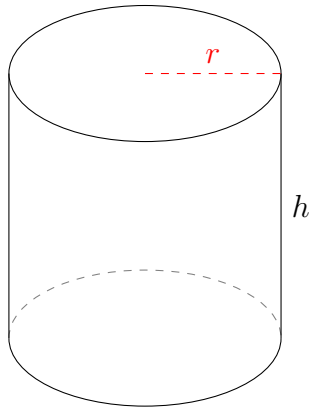
Volume =

Area and Volume of Cylinders (F) 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.

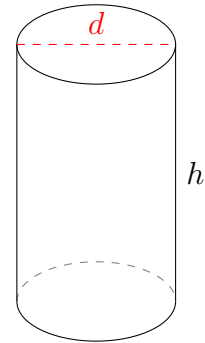


$$r = 1.8 \text{ cm} \quad h = 3.5 \text{ cm}$$

$$\text{Surface Area} = 59.94 \text{ cm}^2$$

$$\text{Volume} = 35.63 \text{ cm}^3$$

2.

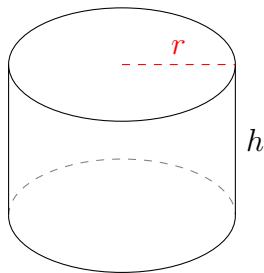


$$d = 2.1 \text{ AU} \quad h = 3.4 \text{ AU}$$

$$\text{Surface Area} = 29.36 \text{ AU}^2$$

$$\text{Volume} = 11.78 \text{ AU}^3$$

3.

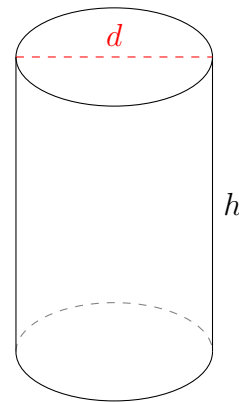


$$r = 1.5 \text{ mi} \quad h = 2 \text{ mi}$$

$$\text{Surface Area} = 32.99 \text{ mi}^2$$

$$\text{Volume} = 14.14 \text{ mi}^3$$

4.



$$d = 2.6 \text{ cm} \quad h = 3.9 \text{ cm}$$

$$\text{Surface Area} = 42.47 \text{ cm}^2$$

$$\text{Volume} = 20.71 \text{ cm}^3$$