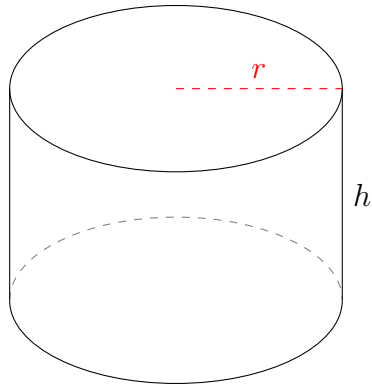


Area and Volume of Cylinders (E)

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.

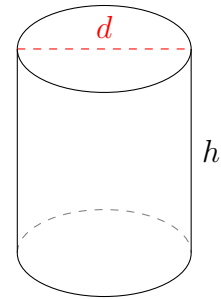


$$r = 17.6 \text{ cm} \quad h = 22.4 \text{ cm}$$

Surface Area =

Volume =

2.

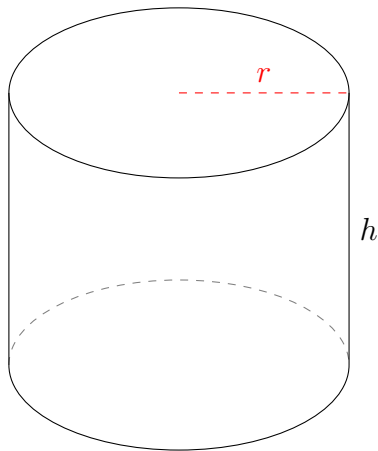


$$d = 9.2 \text{ ft} \quad h = 10.8 \text{ ft}$$

Surface Area =

Volume =

3.

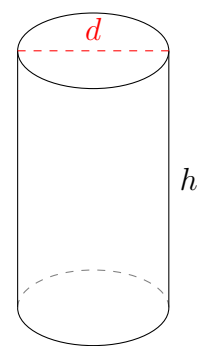


$$r = 9 \text{ yd} \quad h = 14.4 \text{ yd}$$

Surface Area =

Volume =

4.



$$d = 4 \text{ ft} \quad h = 6.8 \text{ ft}$$

Surface Area =

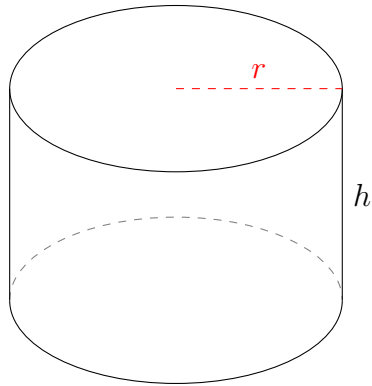
Volume =

Area and Volume of Cylinders (E) 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.

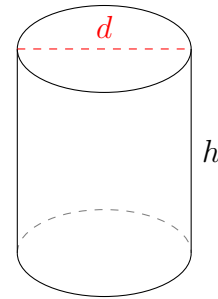


$$r = 17.6 \text{ cm} \quad h = 22.4 \text{ cm}$$

$$\text{Surface Area} = 4423.36 \text{ cm}^2$$

$$\text{Volume} = 21,798.33 \text{ cm}^3$$

2.

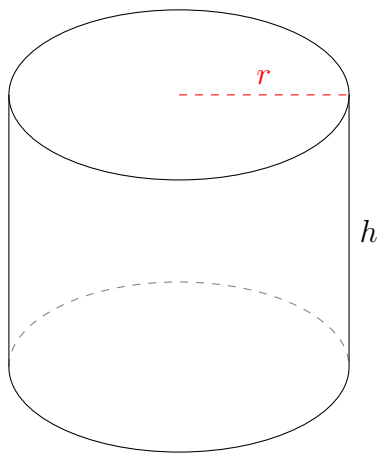


$$d = 9.2 \text{ ft} \quad h = 10.8 \text{ ft}$$

$$\text{Surface Area} = 445.1 \text{ ft}^2$$

$$\text{Volume} = 717.94 \text{ ft}^3$$

3.

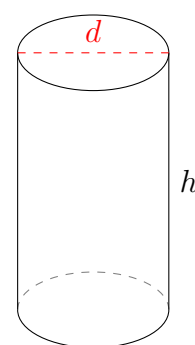


$$r = 9 \text{ yd} \quad h = 14.4 \text{ yd}$$

$$\text{Surface Area} = 1323.24 \text{ yd}^2$$

$$\text{Volume} = 3664.35 \text{ yd}^3$$

4.



$$d = 4 \text{ ft} \quad h = 6.8 \text{ ft}$$

$$\text{Surface Area} = 110.58 \text{ ft}^2$$

$$\text{Volume} = 85.45 \text{ ft}^3$$