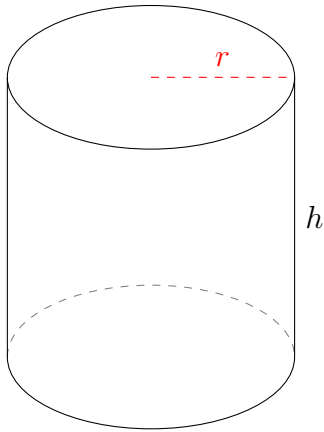


# Area and Volume of Cylinders (F)

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.

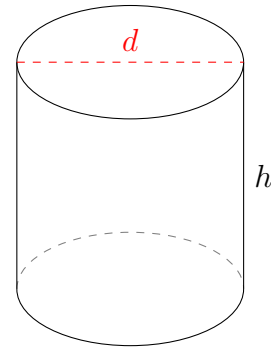


$$r = 15.2 \text{ km} \quad h = 29.6 \text{ km}$$

Surface Area =

Volume =

2.

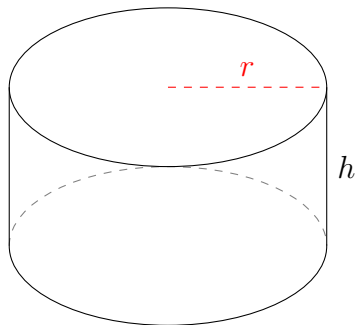


$$d = 24 \text{ km} \quad h = 24 \text{ km}$$

Surface Area =

Volume =

3.

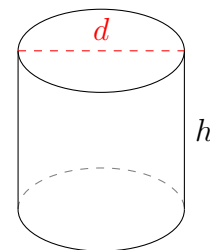


$$r = 2.1 \text{ ft} \quad h = 2.1 \text{ ft}$$

Surface Area =

Volume =

4.



$$d = 13.2 \text{ km} \quad h = 12.6 \text{ km}$$

Surface Area =

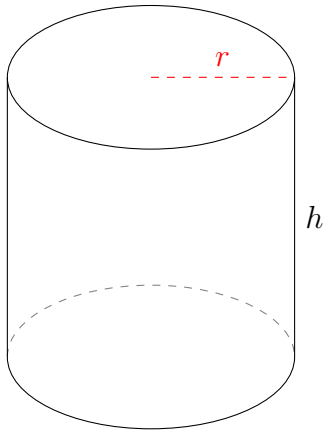
Volume =

# 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.

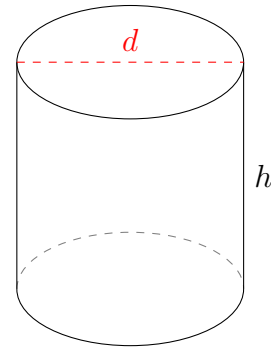


$$r = 15.2 \text{ km} \quad h = 29.6 \text{ km}$$

$$\text{Surface Area} = 4278.6 \text{ km}^2$$

$$\text{Volume} = 21,484.67 \text{ km}^3$$

2.

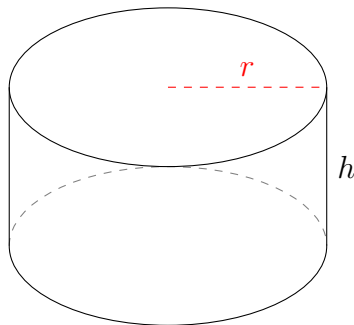


$$d = 24 \text{ km} \quad h = 24 \text{ km}$$

$$\text{Surface Area} = 2714.34 \text{ km}^2$$

$$\text{Volume} = 10,857.34 \text{ km}^3$$

3.

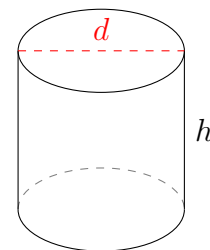


$$r = 2.1 \text{ ft} \quad h = 2.1 \text{ ft}$$

$$\text{Surface Area} = 55.42 \text{ ft}^2$$

$$\text{Volume} = 29.09 \text{ ft}^3$$

4.



$$d = 13.2 \text{ km} \quad h = 12.6 \text{ km}$$

$$\text{Surface Area} = 796.21 \text{ km}^2$$

$$\text{Volume} = 1724.28 \text{ km}^3$$