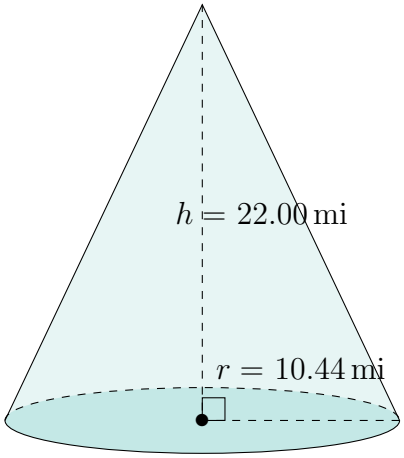
Surface Area and Volume of Cones (I)

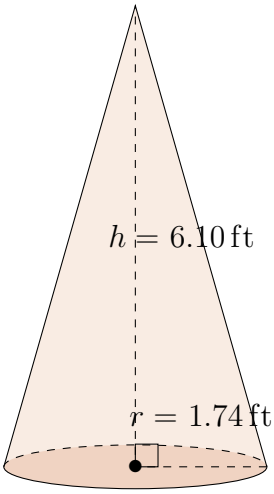
Calculate the surface area and volume for each cone.

$$\text{Surface Area} = \pi r(r + \sqrt{h^2 + r^2}) \quad \text{Volume} = \pi r^2 \frac{h}{3}$$

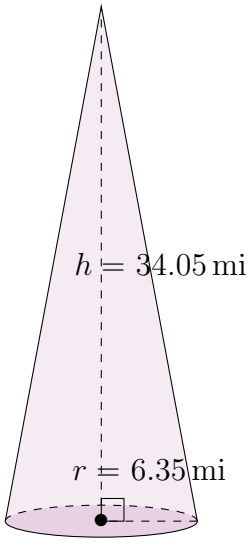
1.



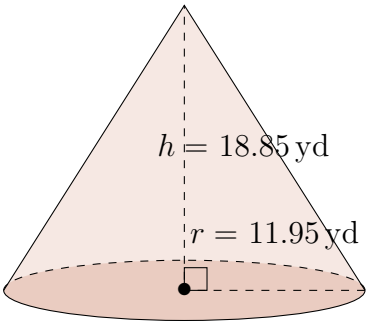
2.



3.



4.

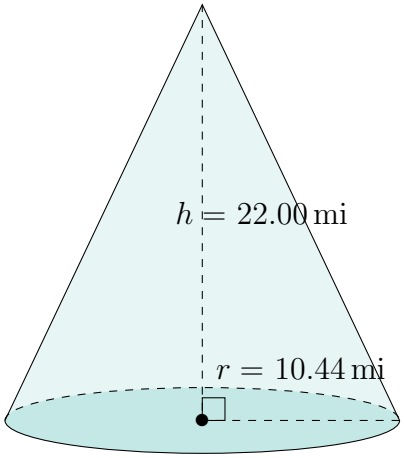


Surface Area and Volume of Cones (I) Answers

Calculate the surface area and volume for each cone.

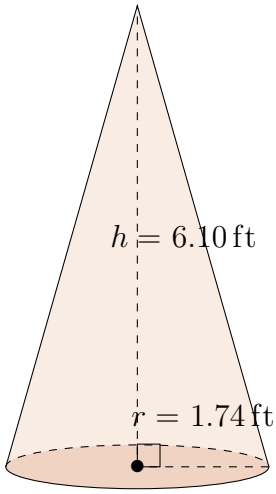
$$\text{Surface Area} = \pi r(r + \sqrt{h^2 + r^2}) \quad \text{Volume} = \pi r^2 \frac{h}{3}$$

1.



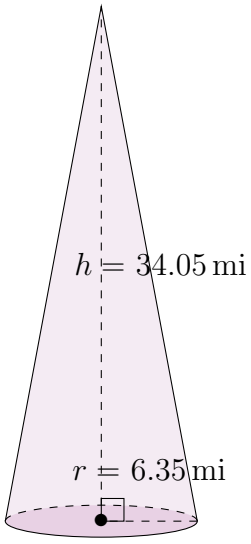
Surface Area: $1141.10\,\text{mi}^2$
Volume: $2511.03\,\text{mi}^3$

2.



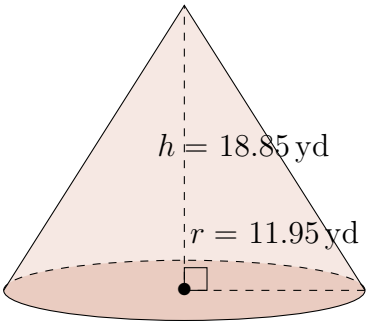
Surface Area: $44.19\,\text{ft}^2$
Volume: $19.34\,\text{ft}^3$

3.



Surface Area: $817.66\,\text{mi}^2$
Volume: $1437.78\,\text{mi}^3$

4.



Surface Area: $1286.52\,\text{yd}^2$
Volume: $2818.87\,\text{yd}^3$