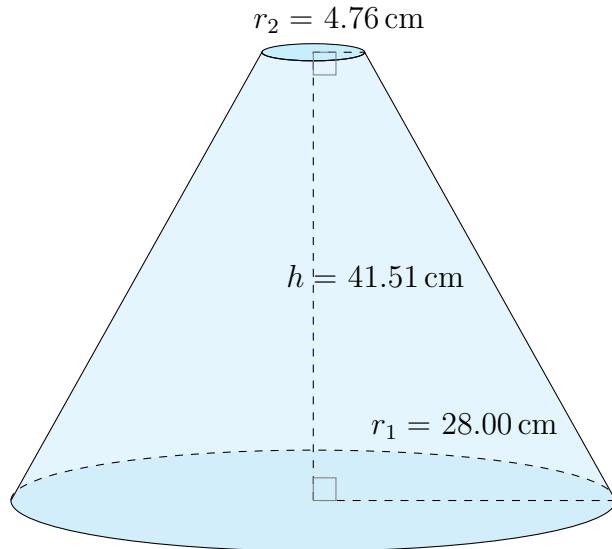


Surface Area and Volume of Conical Frustums (A)

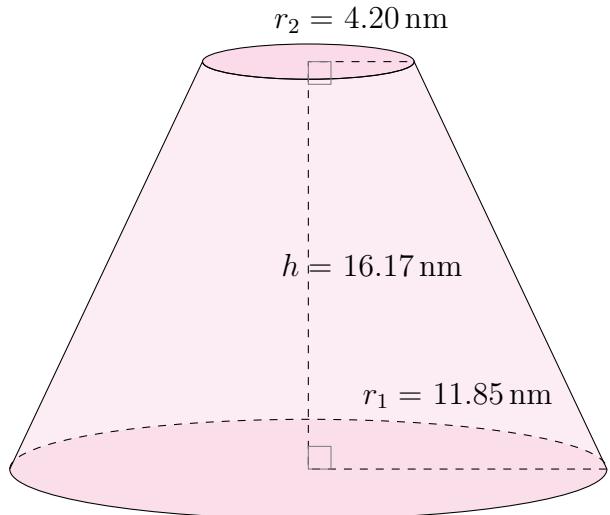
Calculate the surface area and volume for each conical frustum.

$$\text{Surface Area} = \pi(r_1 + r_2)\sqrt{(r_1 - r_2)^2 + h^2} + \pi r_1^2 + \pi r_2^2 \quad \text{Volume} = \frac{\pi}{3}h(r_1^2 + r_2^2 + r_1 r_2)$$

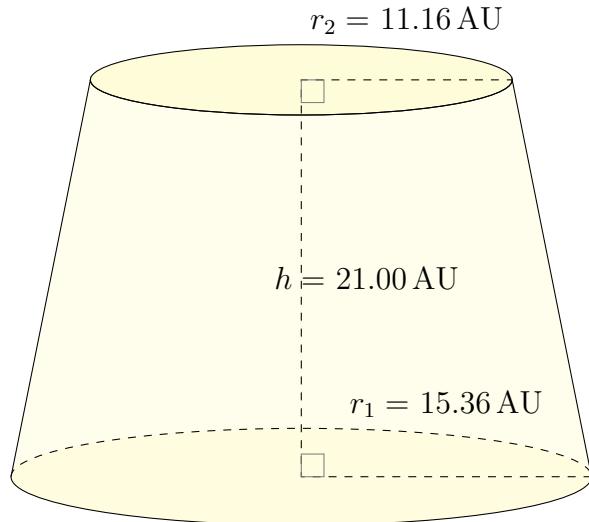
1.



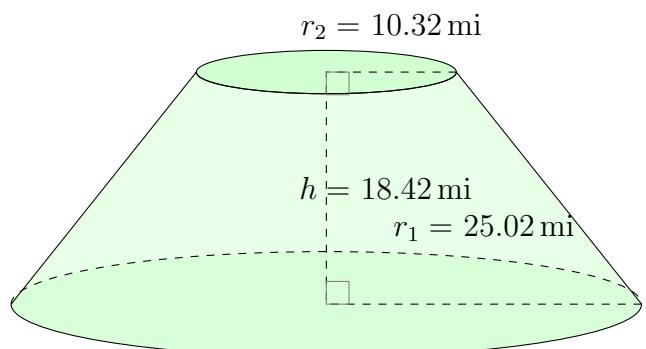
2.



3.



4.

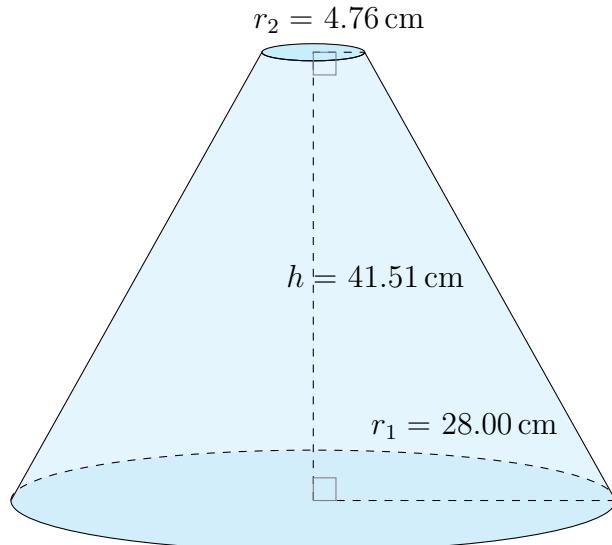


Surface Area and Volume of Conical Frustums (A) Answers

Calculate the surface area and volume for each conical frustum.

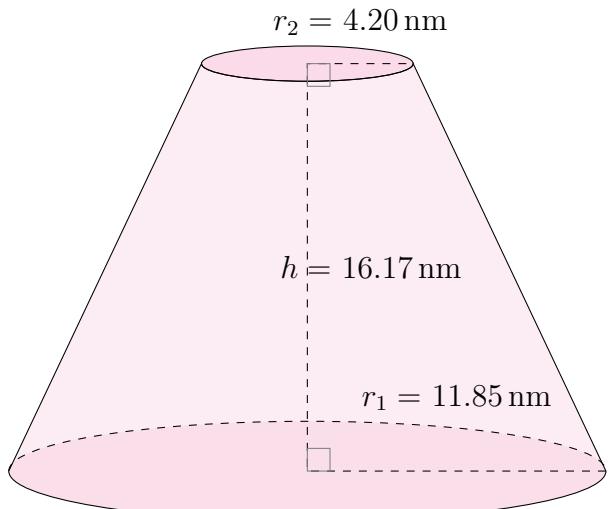
$$\text{Surface Area} = \pi(r_1 + r_2)\sqrt{(r_1 - r_2)^2 + h^2} + \pi r_1^2 + \pi r_2^2 \quad \text{Volume} = \frac{\pi}{3}h(r_1^2 + r_2^2 + r_1 r_2)$$

1.



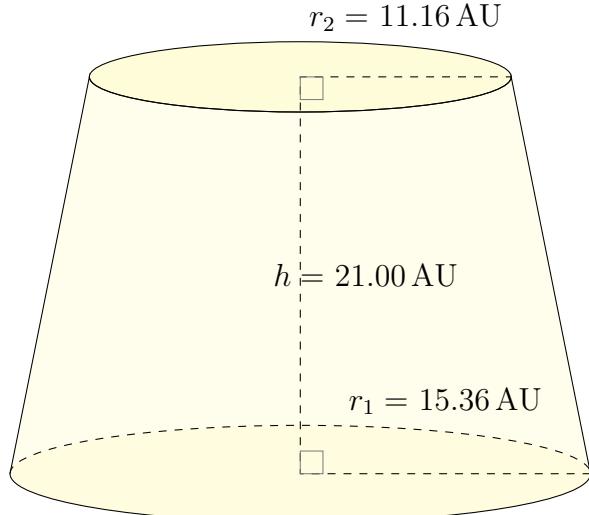
$$\begin{aligned}\text{Surface Area: } & 7430.32 \text{ cm}^2 \\ \text{Volume: } & 40,858.31 \text{ cm}^3\end{aligned}$$

2.



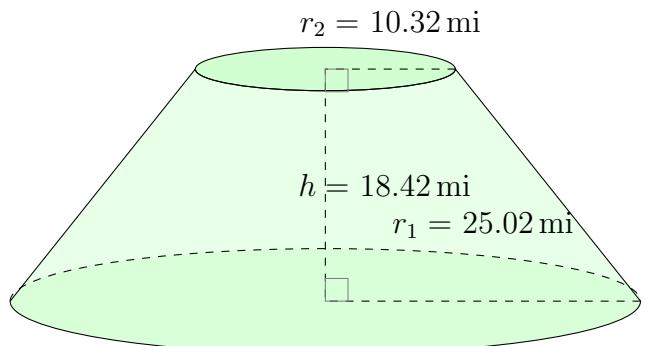
$$\begin{aligned}\text{Surface Area: } & 1398.54 \text{ nm}^2 \\ \text{Volume: } & 3519.27 \text{ nm}^3\end{aligned}$$

3.



$$\begin{aligned}\text{Surface Area: } & 2916.73 \text{ AU}^2 \\ \text{Volume: } & 11,696.93 \text{ AU}^3\end{aligned}$$

4.



$$\begin{aligned}\text{Surface Area: } & 4917.69 \text{ mi}^2 \\ \text{Volume: } & 19,110.17 \text{ mi}^3\end{aligned}$$