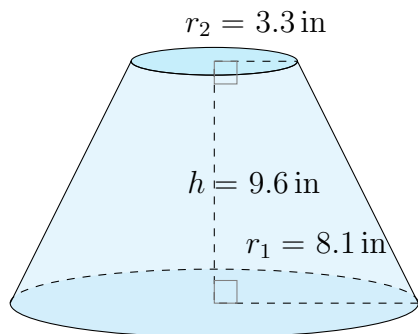


Surface Area and Volume of Conical Frustums (I)

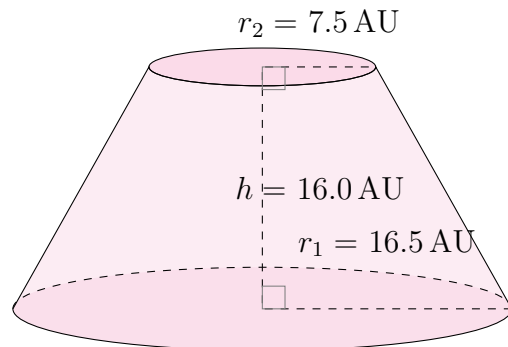
Calculate the surface area and volume for each conical frustum.

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

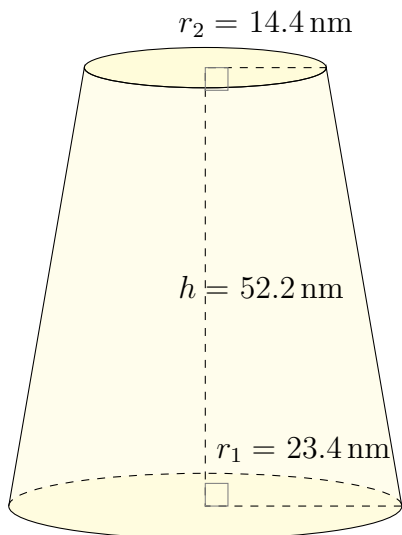
1.



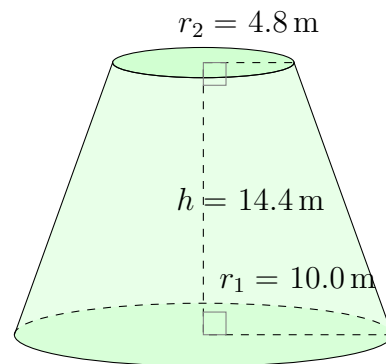
2.



3.



4.

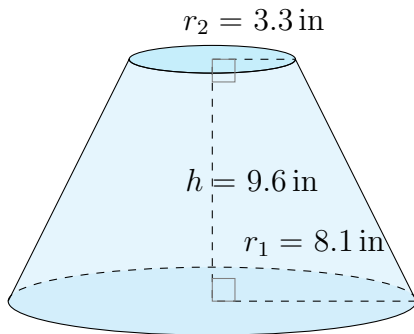


Surface Area and Volume of Conical Frustums (I) Answers

Calculate the surface area and volume for each conical frustum.

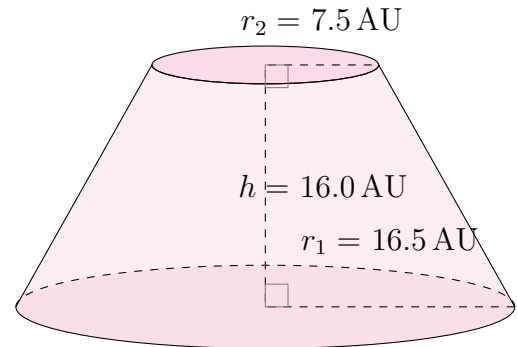
$$\text{Surface Area} = \pi(r_1 + r_2)\sqrt{(r_1 - r_2)^2 + h^2} + \pi r_1^2 + \pi r_2^2 \quad \text{Volume} = \frac{\pi}{3}h(r_1^2 + r_2^2 + r_1 r_2)$$

1.



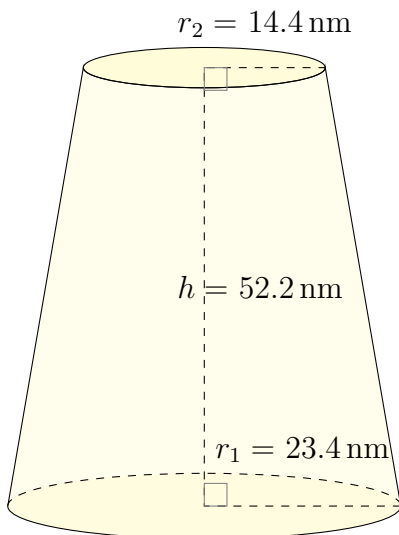
Surface Area: 624.7 in^2
Volume: 1037.8 in^3

2.



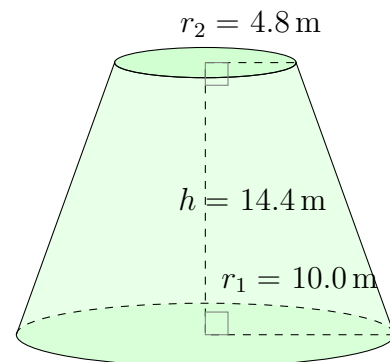
Surface Area: 2416.1 AU^2
Volume: 7577.5 AU^3

3.



Surface Area: 8662.0 nm^2
Volume: $59,686.2 \text{ nm}^3$

4.



Surface Area: 1098.4 m^2
Volume: 2579.2 m^3