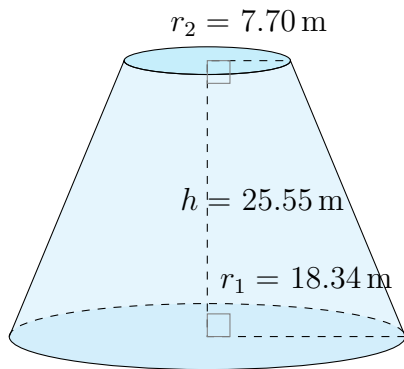


Surface Area and Volume of Conical Frustums (I)

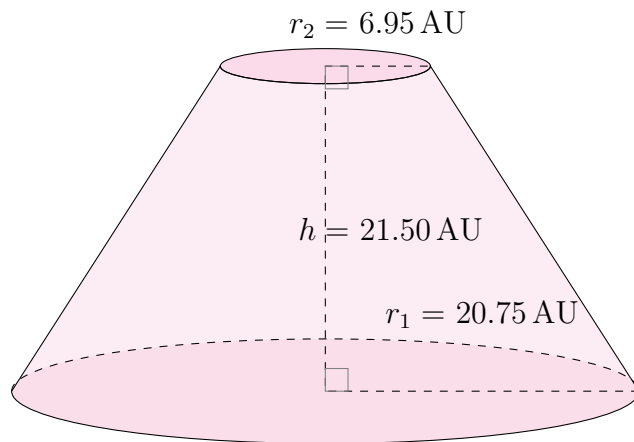
Calculate the surface area and volume for each conical frustum.

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

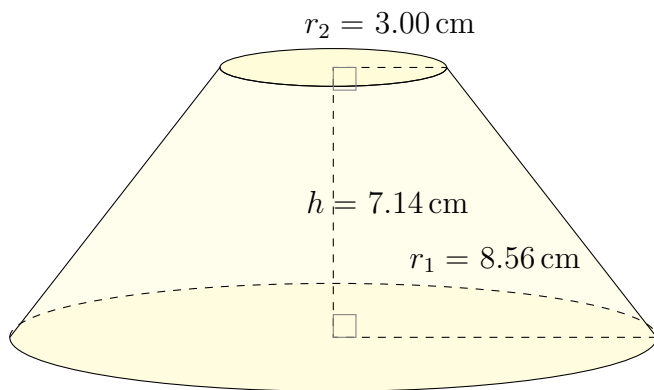
1.



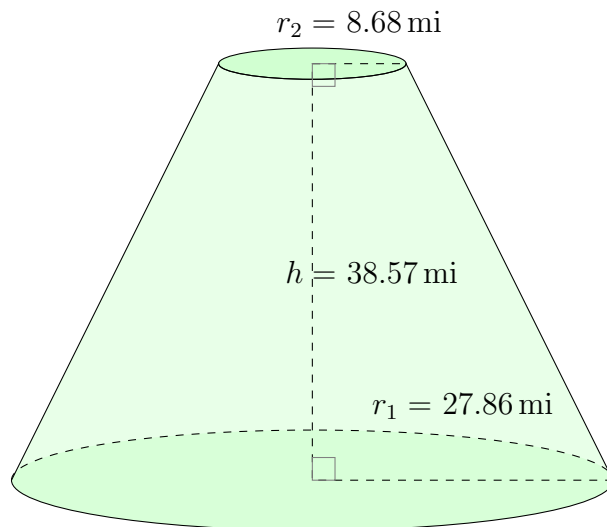
2.



3.



4.

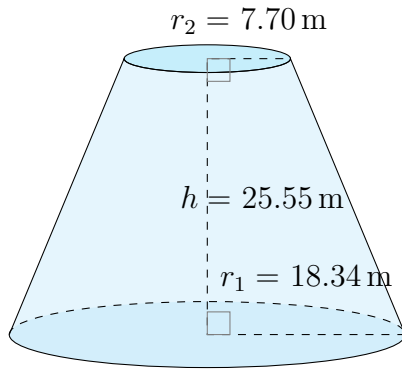


Surface Area and Volume of Conical Frustums (I) Answers

Calculate the surface area and volume for each conical frustum.

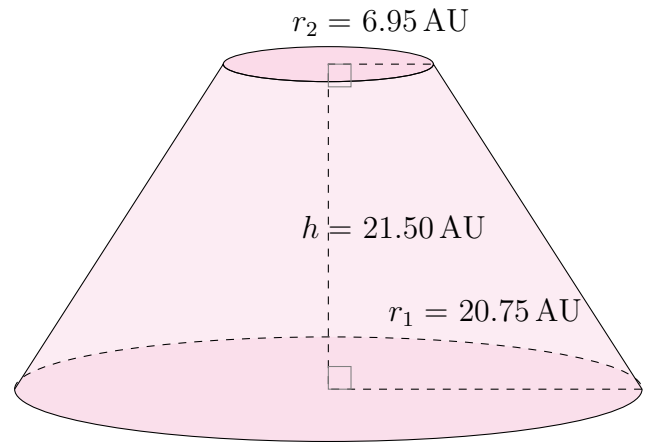
$$\text{Surface Area} = \pi(r_1 + r_2)\sqrt{(r_1 - r_2)^2 + h^2} + \pi r_1^2 + \pi r_2^2 \quad \text{Volume} = \frac{\pi}{3}h(r_1^2 + r_2^2 + r_1 r_2)$$

1.



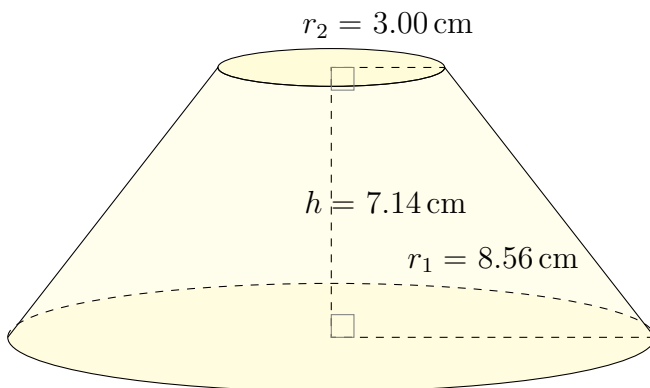
Surface Area: 3507.13 m^2
Volume: $14,364.27 \text{ m}^3$

2.



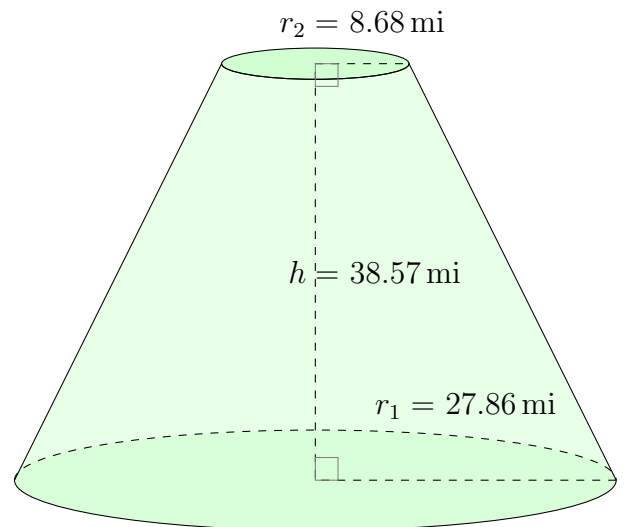
Surface Area: 3727.62 AU^2
Volume: $14,028.43 \text{ AU}^3$

3.



Surface Area: 587.12 cm^2
Volume: 807.17 cm^3

4.



Surface Area: 7619.96 mi^2
Volume: $44,160.73 \text{ mi}^3$