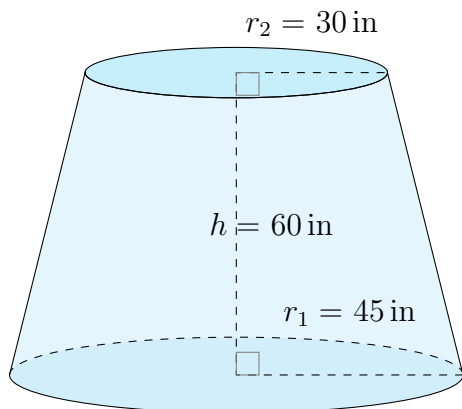


Surface Area and Volume of Conical Frustums (J)

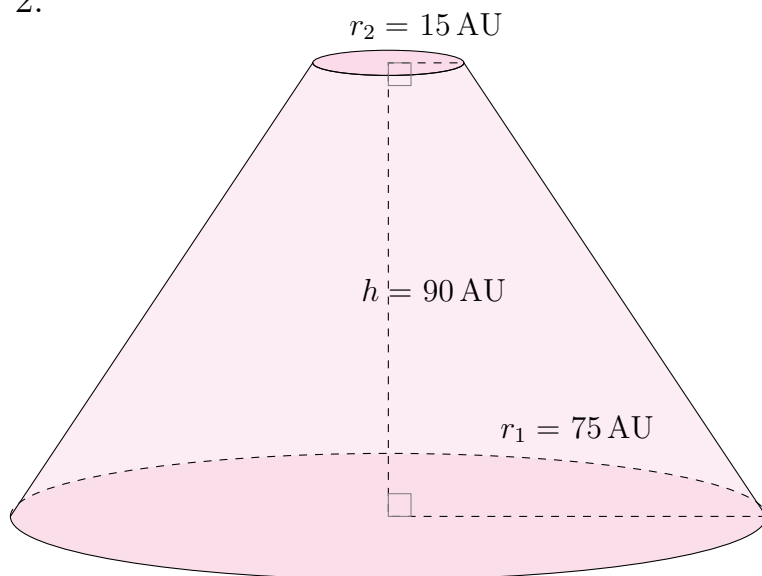
Calculate the surface area and volume for each conical frustum.

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

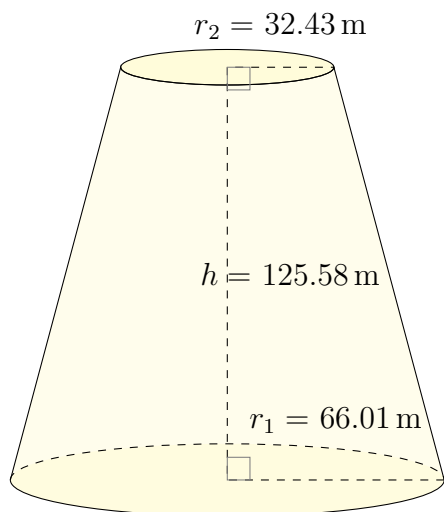
1.



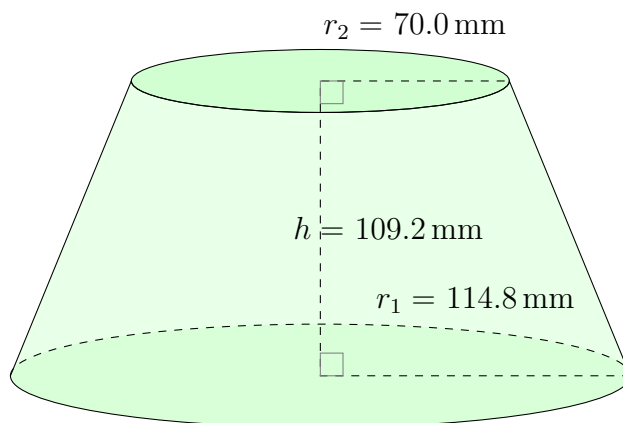
2.



3.



4.

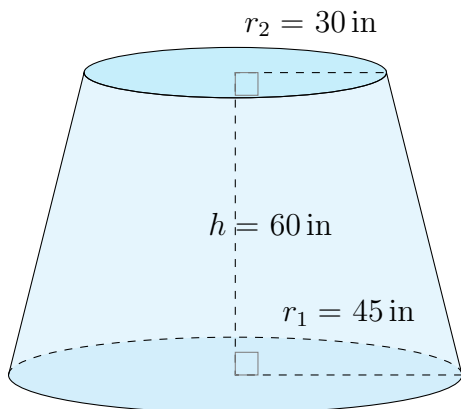


Surface Area and Volume of Conical Frustums (J) Answers

Calculate the surface area and volume for each conical frustum.

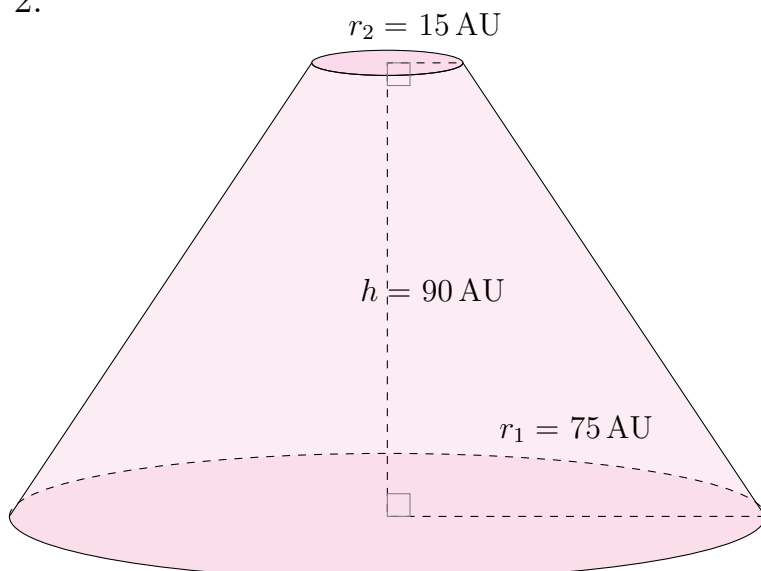
$$\text{Surface Area} = \pi(r_1 + r_2)\sqrt{(r_1 - r_2)^2 + h^2} + \pi r_1^2 + \pi r_2^2 \quad \text{Volume} = \frac{\pi}{3}h(r_1^2 + r_2^2 + r_1 r_2)$$

1.



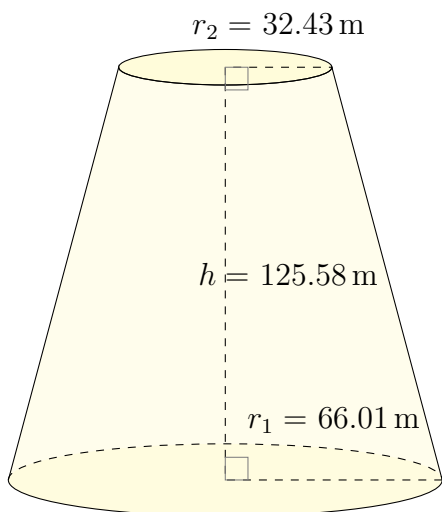
Surface Area: 23,761 in²
Volume: 268,606 in³

2.



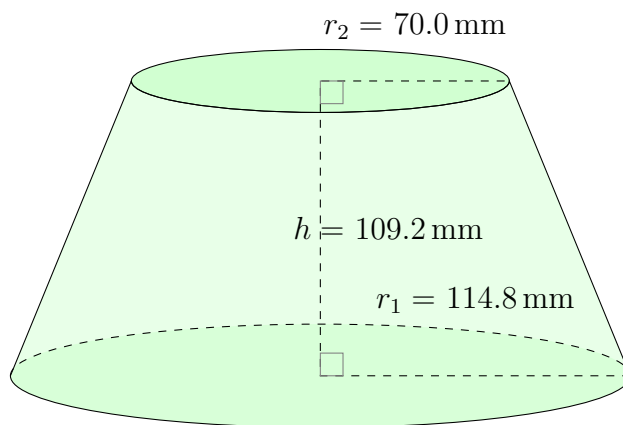
Surface Area: 48,962 AU²
Volume: 657,378 AU³

3.



Surface Area: 57,194.11 m²
Volume: 992,842.77 m³

4.



Surface Area: 125,322.7 mm²
Volume: 2,986,358.6 mm³