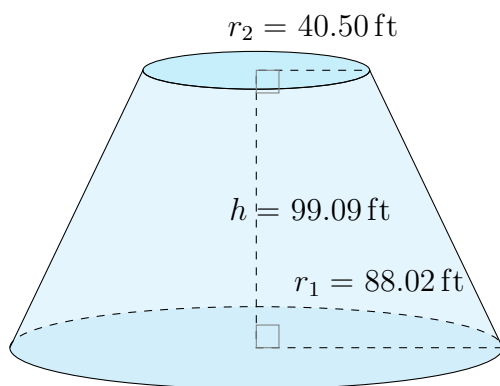


# Surface Area and Volume of Conical Frustums (A)

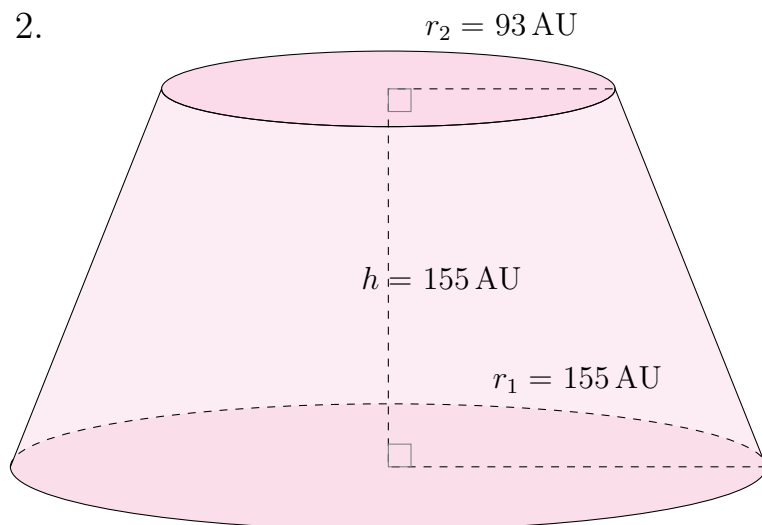
Calculate the surface area and volume for each conical frustum.

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

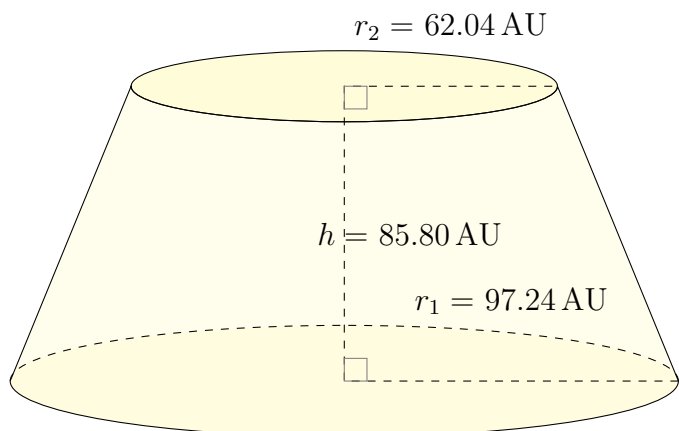
1.



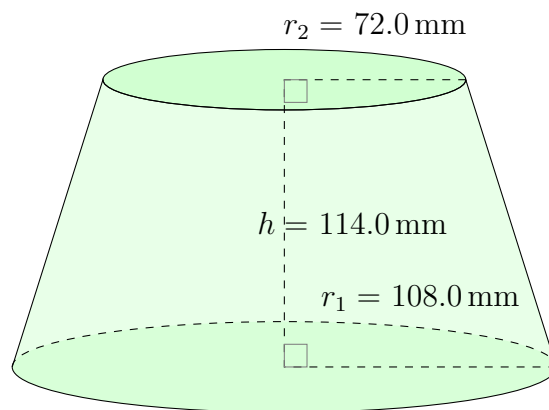
2.



3.



4.

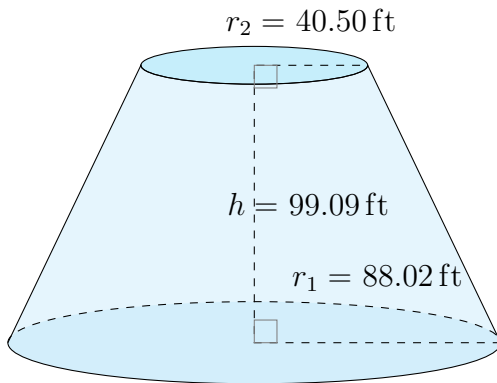


# Surface Area and Volume of Conical Frustums (A) Answers

Calculate the surface area and volume for each conical frustum.

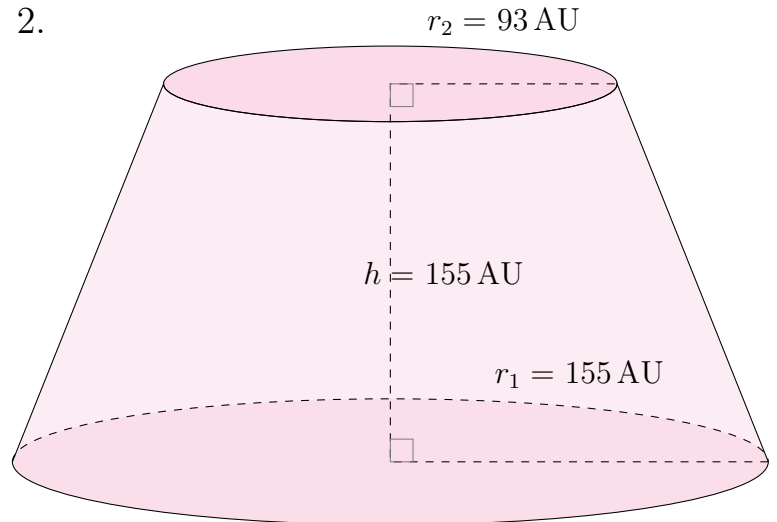
$$\text{Surface Area} = \pi(r_1 + r_2)\sqrt{(r_1 - r_2)^2 + h^2} + \pi r_1^2 + \pi r_2^2 \quad \text{Volume} = \frac{\pi}{3}h(r_1^2 + r_2^2 + r_1 r_2)$$

1.



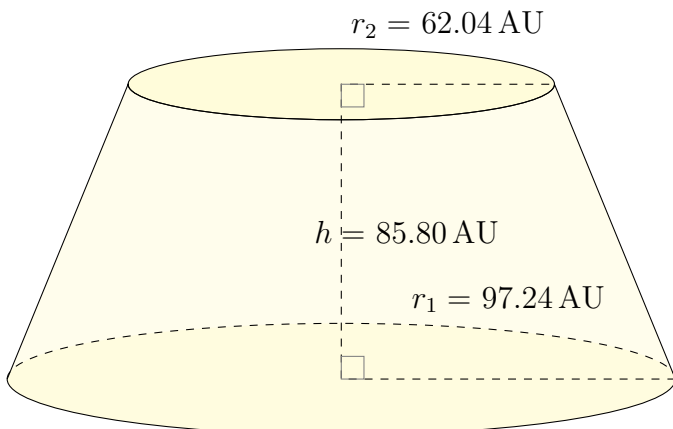
Surface Area: 73,863.60 ft<sup>2</sup>  
Volume: 1,344,047.89 ft<sup>3</sup>

2.



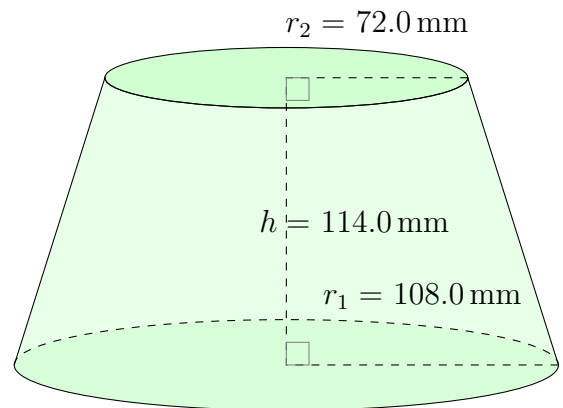
Surface Area: 232,714 AU<sup>2</sup>  
Volume: 7,643,280 AU<sup>3</sup>

3.



Surface Area: 88,203.93 AU<sup>2</sup>  
Volume: 1,737,452.09 AU<sup>3</sup>

4.



Surface Area: 120,533.0 mm<sup>2</sup>  
Volume: 2,939,625.9 mm<sup>3</sup>