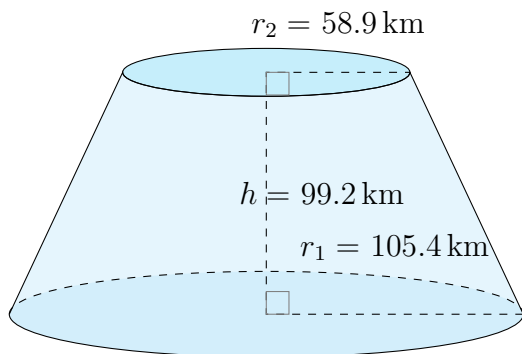


# Surface Area and Volume of Conical Frustums (D)

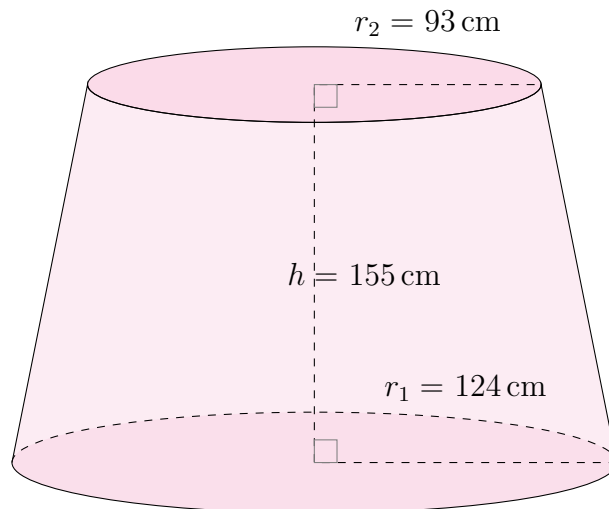
Calculate the surface area and volume for each conical frustum.

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

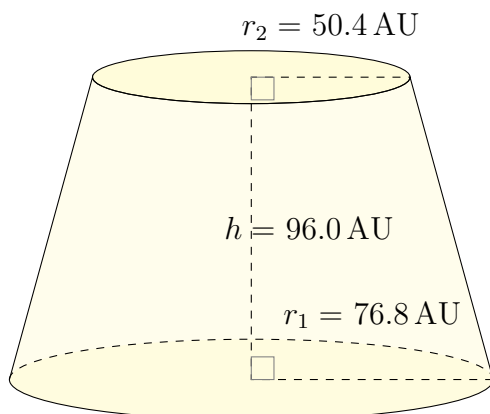
1.



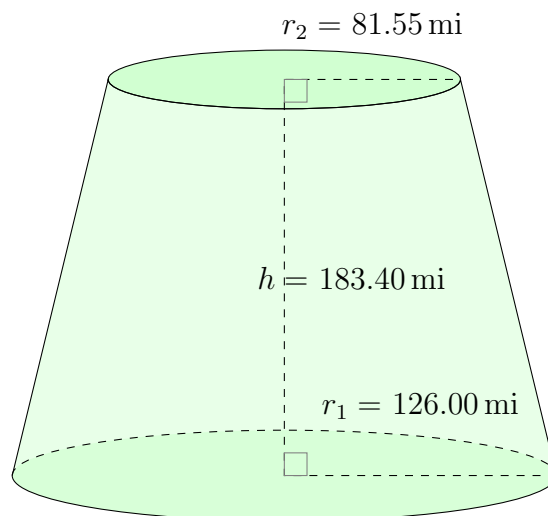
2.



3.



4.

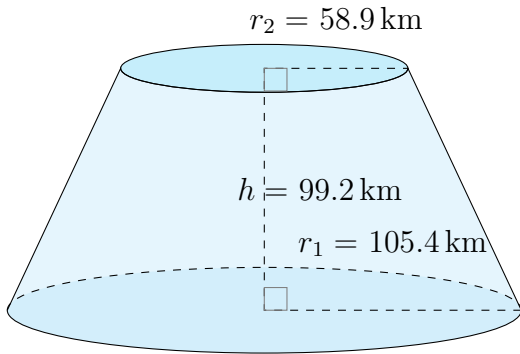


# Surface Area and Volume of Conical Frustums (D) Answers

Calculate the surface area and volume for each conical frustum.

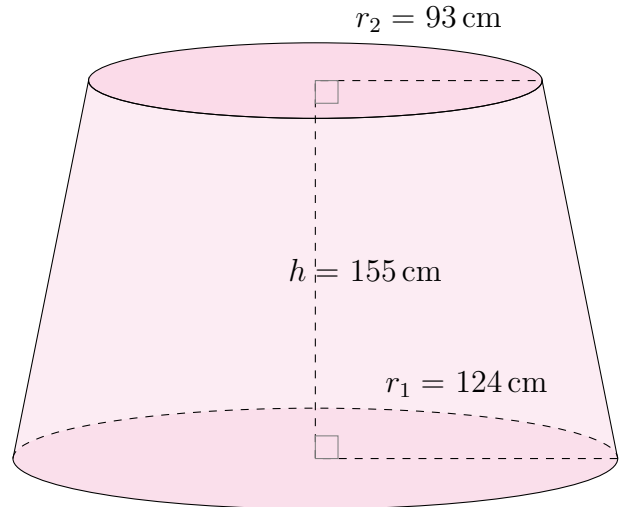
$$\text{Surface Area} = \pi(r_1 + r_2)\sqrt{(r_1 - r_2)^2 + h^2} + \pi r_1^2 + \pi r_2^2 \quad \text{Volume} = \frac{\pi}{3}h(r_1^2 + r_2^2 + r_1 r_2)$$

1.



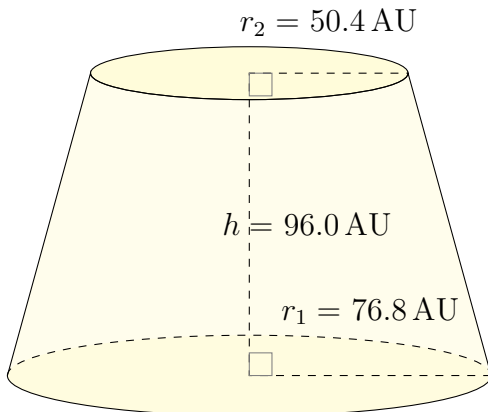
Surface Area:  $102,349.0 \text{ km}^2$   
Volume:  $2,159,335.9 \text{ km}^3$

2.



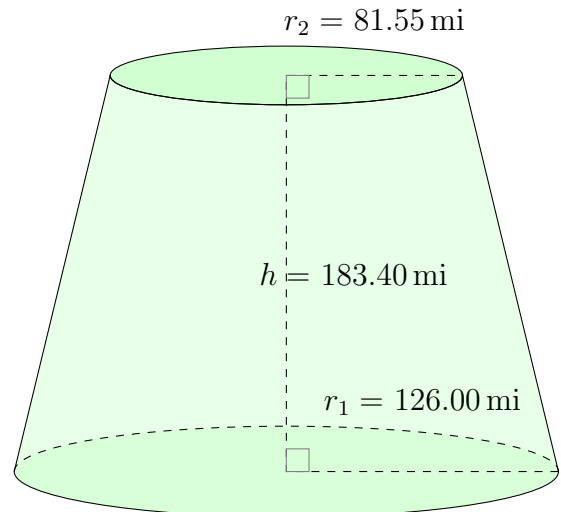
Surface Area:  $183,237 \text{ cm}^2$   
Volume:  $5,771,457 \text{ cm}^3$

3.



Surface Area:  $66,296.8 \text{ AU}^2$   
Volume:  $1,237,447.7 \text{ AU}^3$

4.



Surface Area:  $193,814.61 \text{ mi}^2$   
Volume:  $6,299,764.79 \text{ mi}^3$