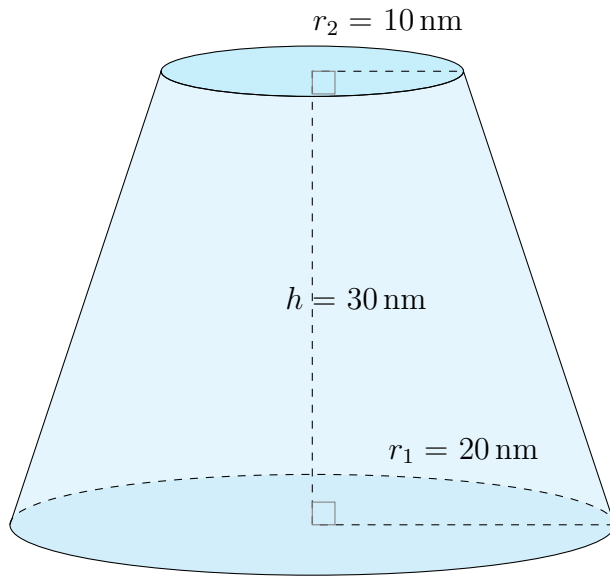


Surface Area and Volume of Conical Frustums (G)

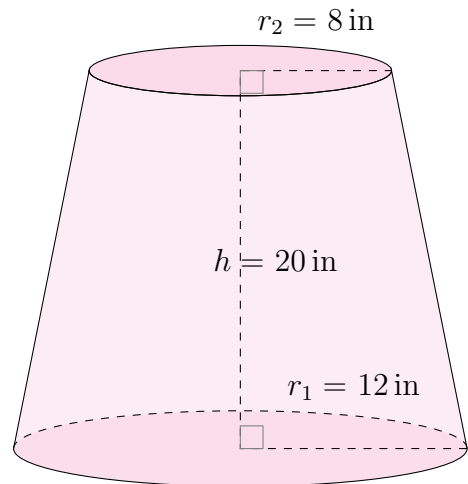
Calculate the surface area and volume for each conical frustum.

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

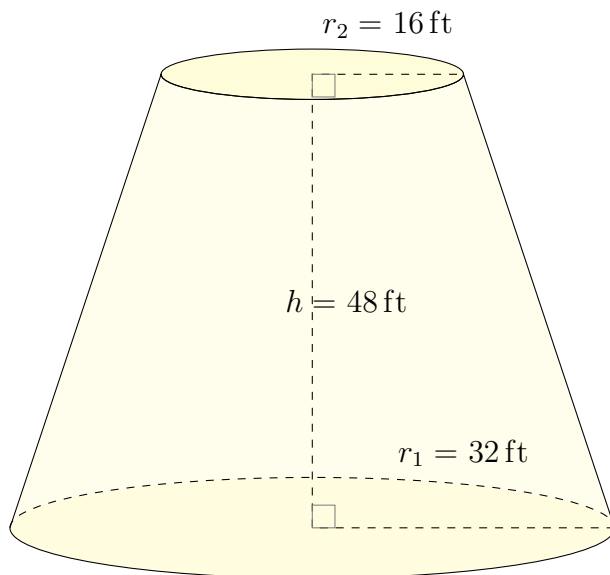
1.



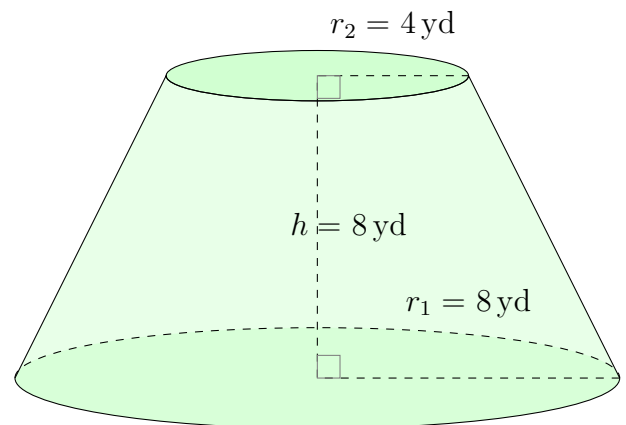
2.



3.



4.

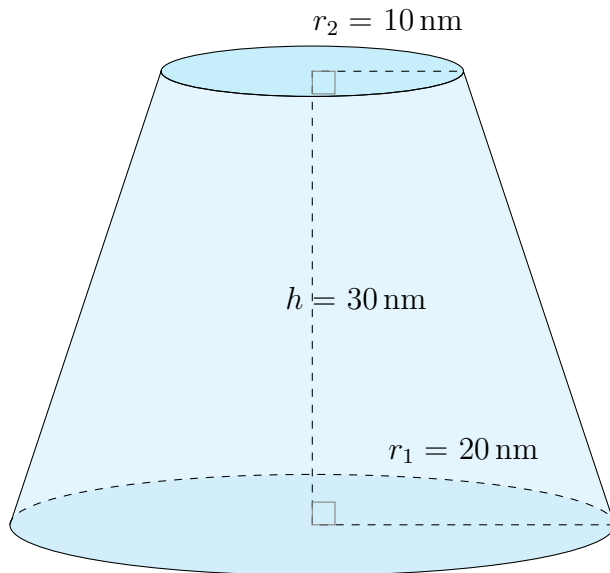


Surface Area and Volume of Conical Frustums (G) Answers

Calculate the surface area and volume for each conical frustum.

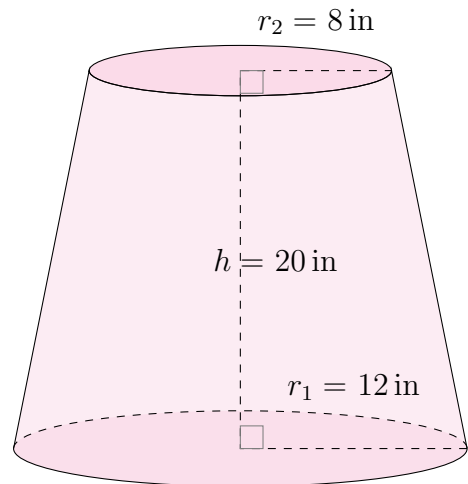
$$\text{Surface Area} = \pi(r_1 + r_2)\sqrt{(r_1 - r_2)^2 + h^2} + \pi r_1^2 + \pi r_2^2 \quad \text{Volume} = \frac{\pi}{3}h(r_1^2 + r_2^2 + r_1 r_2)$$

1.



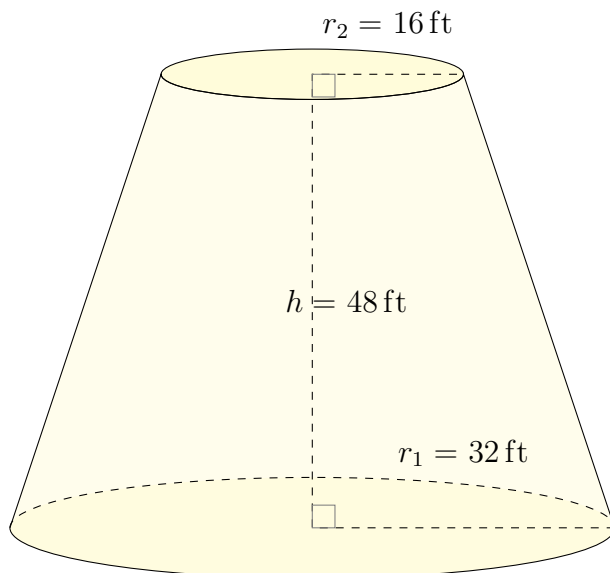
Surface Area: 4551 nm^2
Volume: $21,991 \text{ nm}^3$

2.



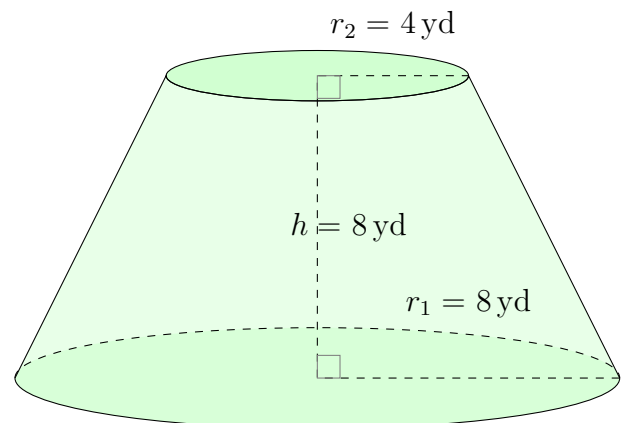
Surface Area: 1935 in^2
Volume: 6367 in^3

3.



Surface Area: $11,651 \text{ ft}^2$
Volume: $90,076 \text{ ft}^3$

4.



Surface Area: 589 yd^2
Volume: 938 yd^3