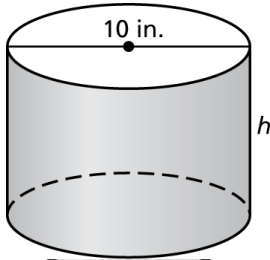


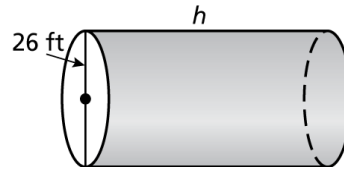
8.2B Volume (8CP)

Find the missing dimension of the cylinder. Round your answer to the nearest whole number.

1. Volume = 550 in.^3

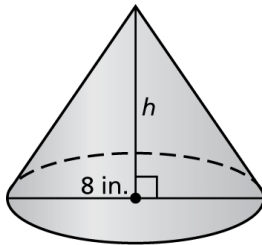


2. Volume = $25,000 \text{ ft}^3$

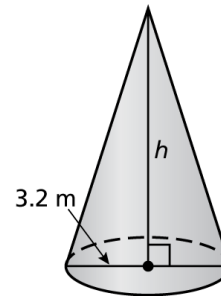


Find the missing dimension of the cone. Round your answer to the nearest tenth.

3. Volume = 100 in.^3

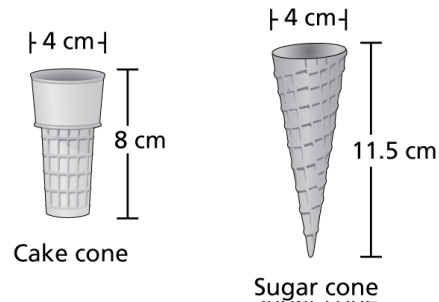


4. Volume = 13.4 m^3



I Scream...You Scream...We all Scream for Ice Cream...Cones!?!

Have you ever been at an ice cream shop and been faced with the question, “Would you like that in a cake cone or sugar cone?” You may or may not have a taste preference, but how do you know which one holds more?



1. Predict which of the two ice cream cones will hold more. Explain your reasoning.
2. The cake cone is approximately in the shape of a cylinder. Calculate the volume of both ice cream cones. Round your answers to the nearest tenth.
3. Was your prediction correct? Explain.
4. You order a medium soft serve frozen yogurt. Does it matter what kind of cone you choose? Will you get more ice cream if you choose the cake cone? What if you order two scoops of hard ice cream instead? Explain your reasoning.
5. The diameter of the sugar cone stays the same. How tall would the sugar cone have to be in order to have the same volume as the cake cone?