Trajectory: Volume

1. #31 Jun 2108
   Randy's basketball is in the shape of a sphere with a maximum circumference of 29.5 inches. Determine and state the volume of the basketball, to the nearest cubic inch.

   (a) What is the radius of the basketball?

   (b) What is 85% of the volume?

   (c) (What is the volume of 2 balls?)

2. #7 Jan 2018
   An ice cream waffle cone can be modeled with a right circular cone with a base diameter of 6.6 centimeters and a volume of 54.45π cubic centimeters. What is the number of centimeters in the height of the waffle cone?

   (a) Write down the formula to use.

   (b) Let x be the value to be solved for. $x =$ _____

   (c) Substitute the given values into the formula.

   Give page of text questions to be completed. (Formatting note)
   For each problem, complete the three modeling steps, as in the example above. Do not solve the algebra.
   Include scale factor examples
   Ask for intermediate values, like the length of a side, or the radius (strike extra words).
   eg:

3. A regular pyramid has a square base. The perimeter of the base is 36 inches and the height of the pyramid is 15 inches. What is the volume of the pyramid in cubic inches?