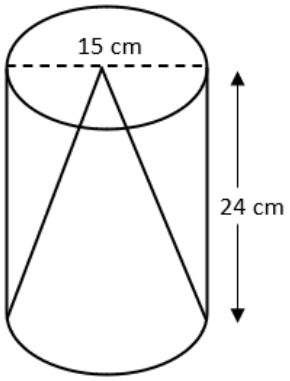
Summative Assessment : Measurement

name: _____ **date:** _____

Outcome: Measurement					
35%	Level 1 (55%)	Level 2 (65%)	Level 3 (75%)	Level 4 (90%)	Level 4+ (100%)
Student has not yet demonstrated understanding of the standard.	Student is demonstrating an emerging understanding of the standard.	Student's demonstration of understanding is approaching the standard.	Student's demonstration of understanding is reaching the standard.	Student's demonstration of understanding is exceeding the standard.	Student's demonstration of understanding is extending the standard.

Proficient (Level 3)

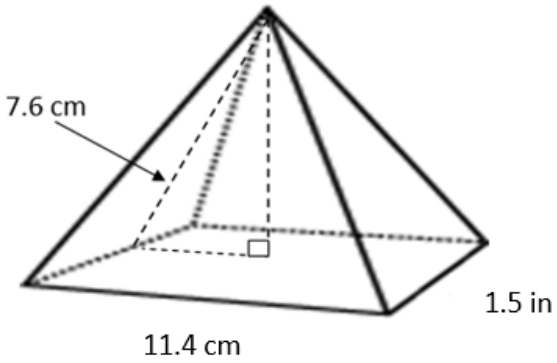
1. A cone shaped trophy is being made from a plastic cylinder with the same height and base as the final conical trophy. How much plastic will be removed to make the cone trophy? Round your answer to the nearest hundredth.



2. When the dimensions of a cylinder are cut in half, what would be the effect on the volume? Explain your thinking.

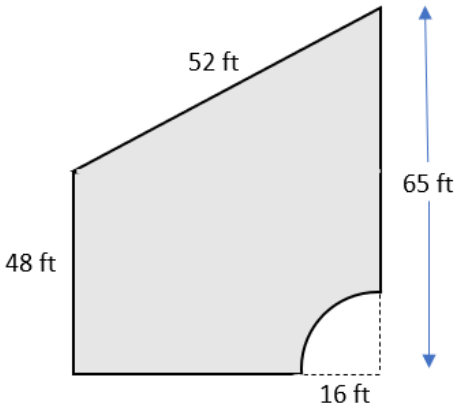
Exceeding Standard (Level 4)

3. Determine the volume of the following pyramid. Round your answer to the nearest hundredth.



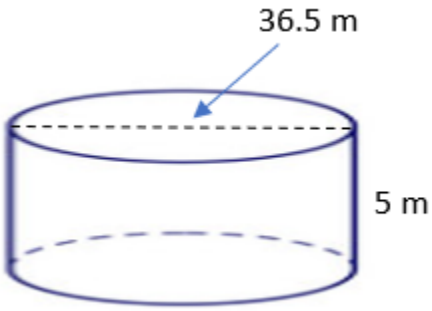
Conversion
1 in = 2.54 cm
1 cm = 0.3937 in

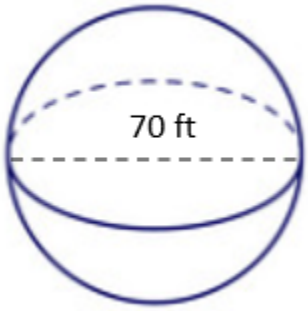
4. A splash pad is being designed for a local park. The outline of the splash pad is shown below. The grey area represents the cement with a quarter circle in the bottom right that will in one corner. It costs $5.50 per square foot of cement. What would be the cost for the cement?



Extending Standard (Level 4+)

5. Two industrial storage tanks are being selected. One is a cylindrical storage tank, and the other is a spherical tank. Which of the following storage tanks has a greater volume?



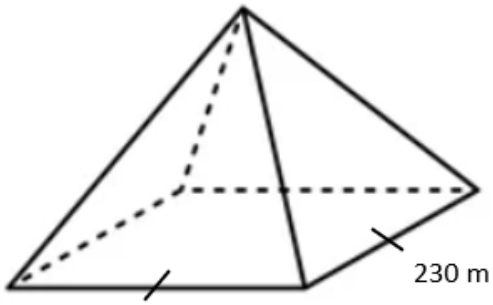


Conversion
1 ft = 0.3048 m
1 m = 3.2808 ft

Volume of Sphere
$V = \frac{4\pi r^3}{3}$

6. The Great Pyramid of Giza is one of the world's most famous pyramids. It contains the burial chamber of Pharaoh Khufu. When first constructed the pyramid was 146.5 m high. Over the years the pyramid's height has decreased, the volume of the Great Pyramid of Giza is now 2 415 767 m^3.

a) What is the height of the pyramid today? Round your answer to the nearest metre.



b) By what percent has the pyramid decreased in volume? Round your answer to the whole percent.