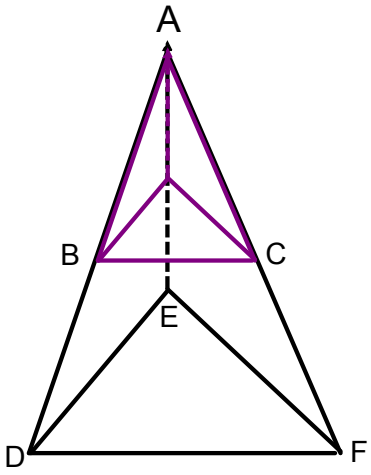
Quiz: Ratios of Similarity

Name: _____

1. The volume of the smaller pyramid (outlined in purple) below is $16\ cm^3$.
Points B and C are the midpoints of sides AD and AF respectively.

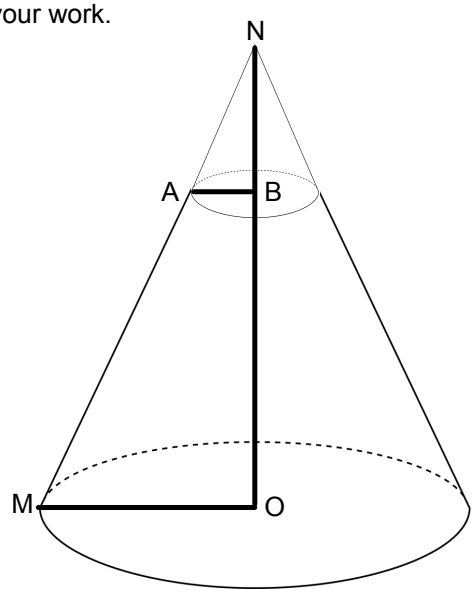
What is the volume of the larger pyramid?



Ans:_____

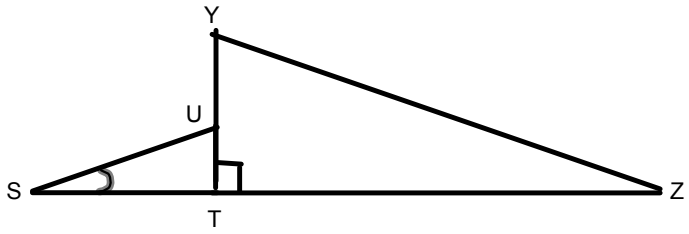
2. Two cones are created by rotating triangles MNO and ABN. Points A and B divide sides NM and NO each in a ratio of 1:2. The volume of the smaller cone, formed by triangle ABN is $46\ cm^3$. Determine the volume of the larger cone formed from triangle MNO.

Clearly show all your work.



Ans: _____

3. A figure is composed of two similar right triangles STU and TYZ.



Side TU measures 2 cm, segment UY measures 3.4 cm, and angle <TSU measures 19°.

Calculate the total area of the figure.

Round off your answer to the nearest tenth. Clearly show the steps in the solution and

the geometry principle(s) you used.

Ans: _____