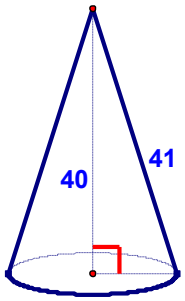
5.

Given the right circular cone shown, find

a. Its volume

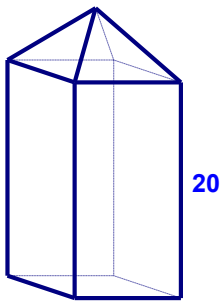
b. Its lateral area

c. Its total area



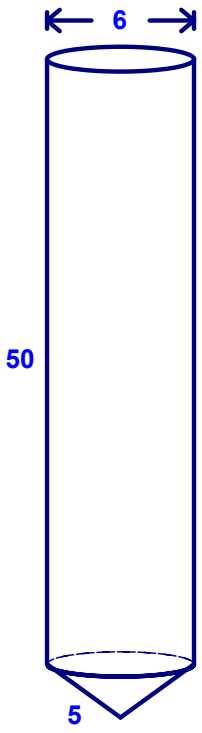
6.

A tower has a total height of 24 m. The height of the wall is 20 m. the base is a rectangle with an area of 25 m^2. Find the total volume of the tower to the nearest cubic meter.



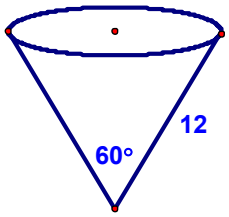
7.

A well has a cylindrical wall 50 m deep and a diameter of 6 m. The tapered bottom forms a cone with a slant height of 5 m. Find, to the nearest cubic meter, the volume of water the well could hold.



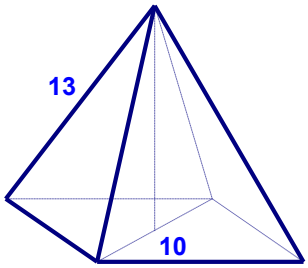
8.

Find, to the nearest tenth, the volume of a cone with a 60° vertex angle and a slant height of 12.



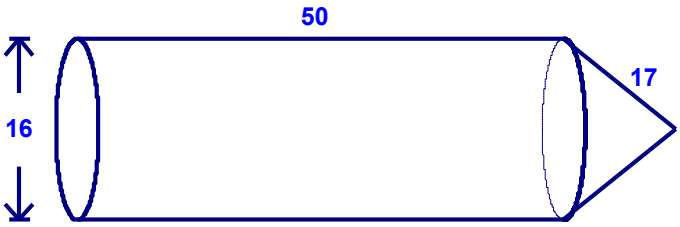
9.

A pyramid has a square base with a diagonal of 10. Each lateral edge measures 13. Find the volume of the pyramid.



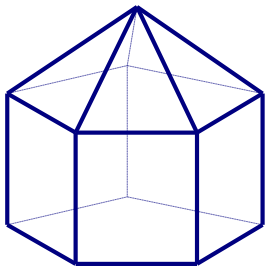
12.

A rocket has the dimensions shown. If 60% of the space in the rocket is needed for fuel, what is the volume, to the nearest whole unit, of the portion of the rocket that is available for nonfuel items?



13.

A gazebo (garden house) has a pentagonal base with an area of 60 m^2. The total height to the peak is 16 m. The height of the pyramidal roof is 6 m. Find the gazebo's total volume.



14.

Use the diagram to find

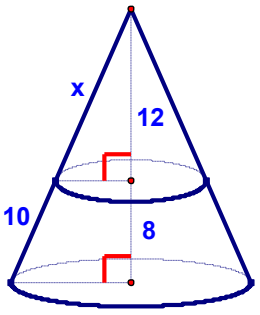
a. x

b. the radii of the circles

c. The volume of the smaller cone

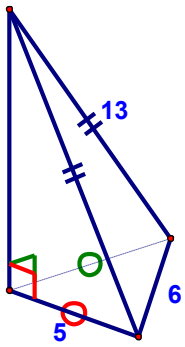
d. The volume of the larger cone

e. The volume of the frustum



19.

Find the volume of the pyramid shown.



20.

Find the volume of the frustum shown.