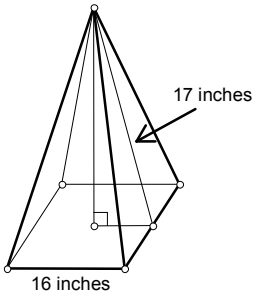
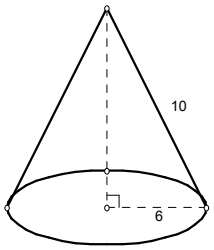
Geometry Worksheet Name: _____

Section 10.7 – Volumes of Pyramids and Cones Period: _____

1. Find the volume of the regular square pyramid.

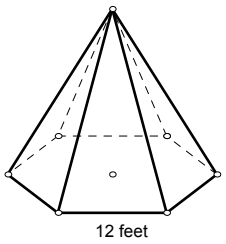


2. Find the volume of the right cone.



3. Find the volume of the right cone if the base is a circle with area 48π square inches and its height is 10 inches.

4. Find the volume of the regular hexagonal pyramid if the lateral edge is 15 feet.



5. A pyramid has a base are of 25 square inches and a volume of 100 cubic inches. Find the height of the pyramid.

6. The volume of a cone is 16π cubic inches and its height is 12 inches. Find the radius of the cone.

7. Find the volume of a cone whose base diameter is $4\sqrt{5}$ and whose height is 10.

8. The volume of a regular square pyramid is 12 cubic meters and the height of the pyramid is 4 meters. Find the length of the base edge of the pyramid.

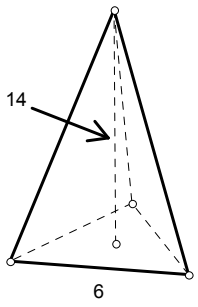
9. A right triangular pyramid has a right triangle for its base with a leg of 5 and a hypotenuse of 13. The pyramid height is 6. Find the volume of the pyramid.

10. Find the volume of a cone with a slant height of 20 feet and a diameter of 32 feet.

11. A cone has a volume of 432π cubic centimeters and a height of 9 centimeters. Find the slant height of the cone.

12. A cone has a radius of 3 inches and a total area of 24π square inches. Find the volume of the cone.

13. Find the volume of the regular pyramid.



14. A solid metal cylinder with radius 6 cm and height 18 cm is melted down and recast as a solid cone with radius 9 cm. Find the height of the cone.

15. Water is pouring into a cone shaped reservoir at a rate of 1.8 cubic meters per minute. Find to the nearest minute, how long it will take to fill the reservoir (from start to finish).