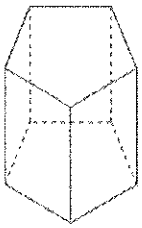
Name_____ Period_____ Date_____

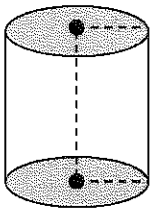
BERNHARD GT GEOMETRY QUIZ – Surface Area and Volume

SHOW ALL WORK FOR CREDIT!! Round two decimals when appropriate!

_____1) **Find the surface area of a pentagonal prism with an apothem of 4 inches and a height of prism of 6 inches.**



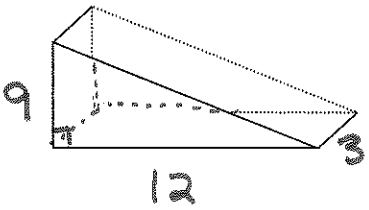
_____2) **Find the radius of the base of a cylinder with a surface area of** 28π **ft²** **and the height of the cylinder is 3 feet.**



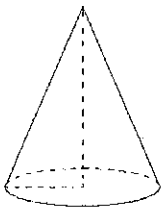
_____3. **What 2 polygons can be formed from vertical cross-sections of a triangular pyramid?**

_____

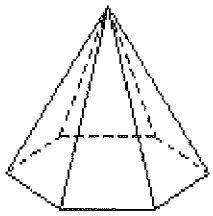
_____4) **Find the volume of the triangular prism.**



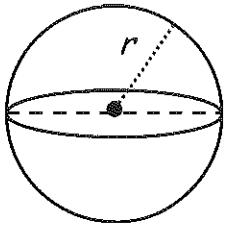
_____5) **Find the surface area of a cone with a circumference of base of** 10π **cm, and the angle between the radius and the lateral height is 46°.**



_____6) Find volume of a regular hexagonal pyramid with a base perimeter of of 24 yards, and a height of pyramid of 10 yards.

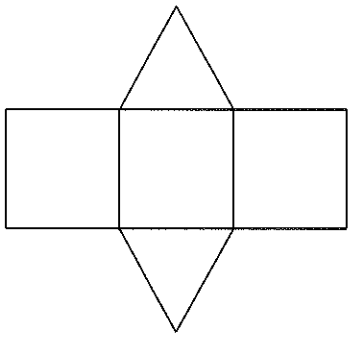


_____7) The volume of a sphere is 36π m^3, find its surface area.



Name the solid formed by the net. SHADE THE BASE, and find its surface area. (For #s 8-9, the polygons are regular with all edges measuring 10 cm)

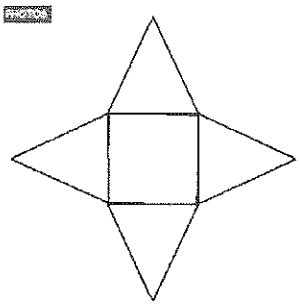
8.



Solid: _____

Surface Area = _____

9.



Solid: _____

Surface Area = _____

10. **Name the solid. Find the length, width, height and volume of the solid.**

Solid: _____

Width = _____

Height = _____

Length = _____

Volume = _____