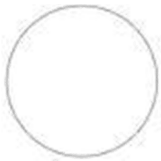


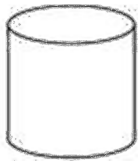
MT 1810 Calculus II
Helpful Formulas for Exam 1

Below you will find some area and volume formulas that may be useful as you work on Exam 1. Notice that this does not mean that you will necessarily need all of these formulas during the exam.

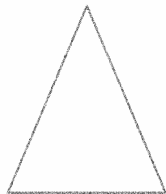
Area of a Circle: $\pi \cdot r^2$ where r is the radius of the circle.



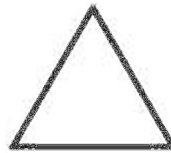
Volume of a Circular Prism (Cylinder): **(Area of the Base Circle) · (Height of Prism) = $\pi \cdot r^2 \cdot h$** where r is the radius of the base circle and h is the height of the prism.



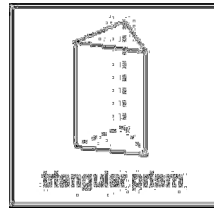
Area of a Triangle: $\frac{1}{2} \cdot b \cdot h$ where b is the base of the triangle and h is the height of the triangle.



Area of an Equilateral Triangle: $\frac{s^2\sqrt{3}}{4}$ where s is the length of the side of the equilateral triangle



Volume of a Triangular Prism: **(Area of Base Triangle) · (Height of Prism)**



Area of a Rectangle: $l \cdot w$ where l is the length of the rectangle and w is the width of the rectangle



Volume of a Rectangular Prism (Box): **(Area of the Base Rectangle) · (Height of Prism)**

