

Calculus Fall 2012
S. Sisney

Homework 1

Review graphs of functions

Problems:

Due:

1. Write the equation of the line through $(3, -8)$ with slope $\frac{2}{5}$.
2. Write the equation of the line through $(-6, 4)$ perpendicular to $2x - 3y = -24$.
3. Write the equation of the line tangent to $y = x^2$ at $(2, 4)$.
4. Write the general equation for, and describe the graph of the following types of functions: constant, linear, and quadratic.
5. Sketch the graph of $f(x) = x^5$
6. Sketch the graph of $f(x) = x^8$