Classwork 3
College Algebra and Trigonometry, MTH 123, Section 3260, Fall 2011
Instructor: Abhijit Champanerkar
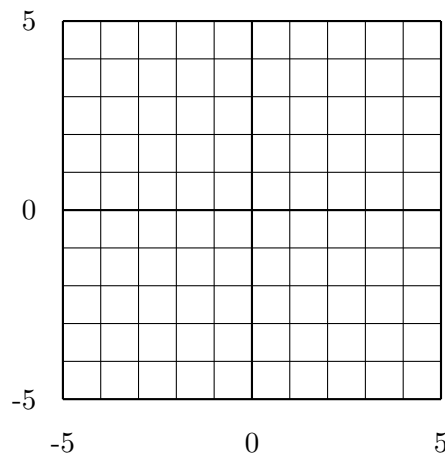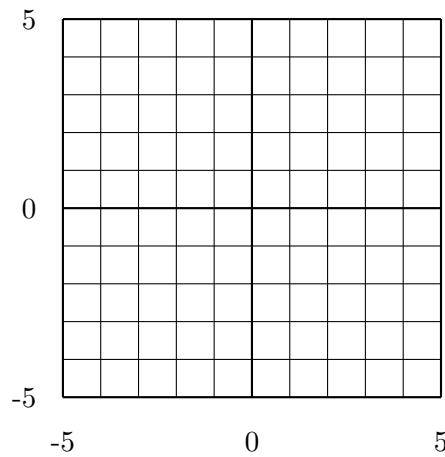### Sept 14th 2011

Name: _____

1.
$$f(x) = \begin{cases} 6 - 2x & \text{if} & x \geq 2 \\ 2x & \text{if} & -1 \leq x < 2 \\ -2 - 2x & \text{if} & x < -1 \end{cases}$$

Evaluate $f(4), f(2), f(0), f(-1), f(-4)$. Sketch the graph of $y = f(x)$.

2. Draw a graph of a function which is increasing on the interval $[-5, -2]$, decreasing on the interval $(-2, 1]$ and increasing on the interval $(1, 5]$.

3. Without sketching the graph say whether the function $f(x) = 1 - 3x$ increasing or decreasing.