

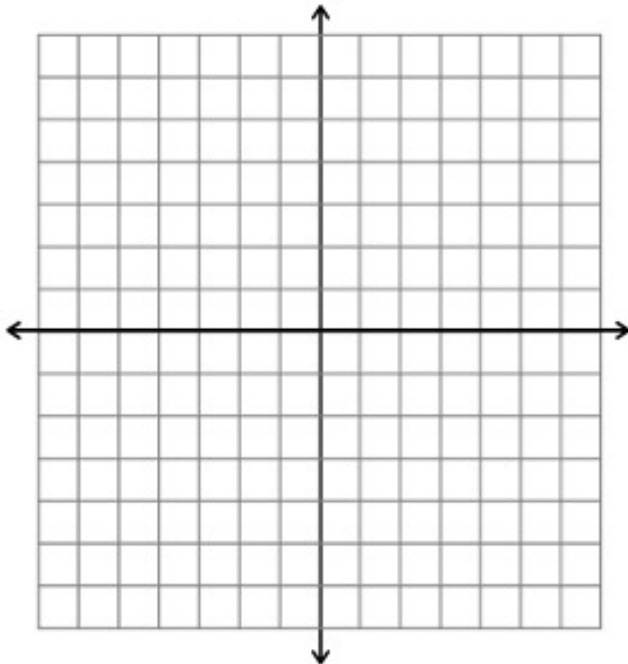
Quiz 1A, Precalculus-04

Dr. Graham-Squire, Fall 2013

Name: _____

1. (4 points) Sketch a graph of the piecewise function. Make sure to correctly label the points on the graph!

$$f(x) = \begin{cases} 2x + 3 & \text{if } x \leq -1 \\ x^2 - 2 & \text{if } x > -1 \end{cases}$$



2. (2 points) Find the domain of the function $f(x) = \sqrt{7x - 20}$. Leave your answer in fractional form, and explain in words why that is the correct domain for the function.

3. (4 points) Jason builds a rectangular fence in his backyard. The length of the fence is 10 feet longer than the width of the fence, and the rectangle has an area of 281.25 ft^2 . Find the width of the fence. Make sure to use mathematical equations- guess and check will NOT get full credit.

Quadratic formula is $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$, if you need it.