

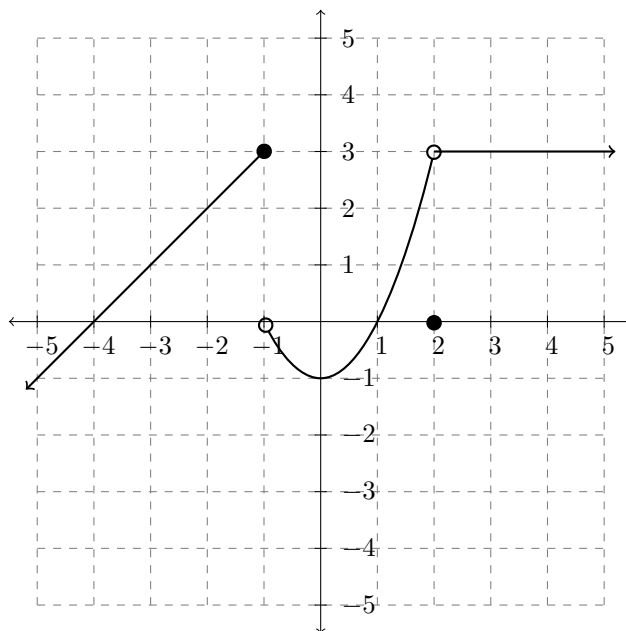
MATH 135: Quiz 2

September 16, 2014

Name: _____ Sec: _____

1. Consider the piecewise-defined function f below.

$$f(x) = \begin{cases} x + 4 & x \leq -1 \\ x^2 - 1 & -1 < x < 2 \\ 0 & x = 2 \\ 3 & x > 2 \end{cases}$$



(a) Find $f(-1)$ and compute $\lim_{x \rightarrow -1} f(x)$ algebraically.

(b) Find $f(2)$ and determine $\lim_{x \rightarrow 2} f(x)$ using the graph on the previous page.

2. Evaluate the following limit:

$$\lim_{x \rightarrow 4} \frac{\sqrt{x} - 2}{x - 4}$$