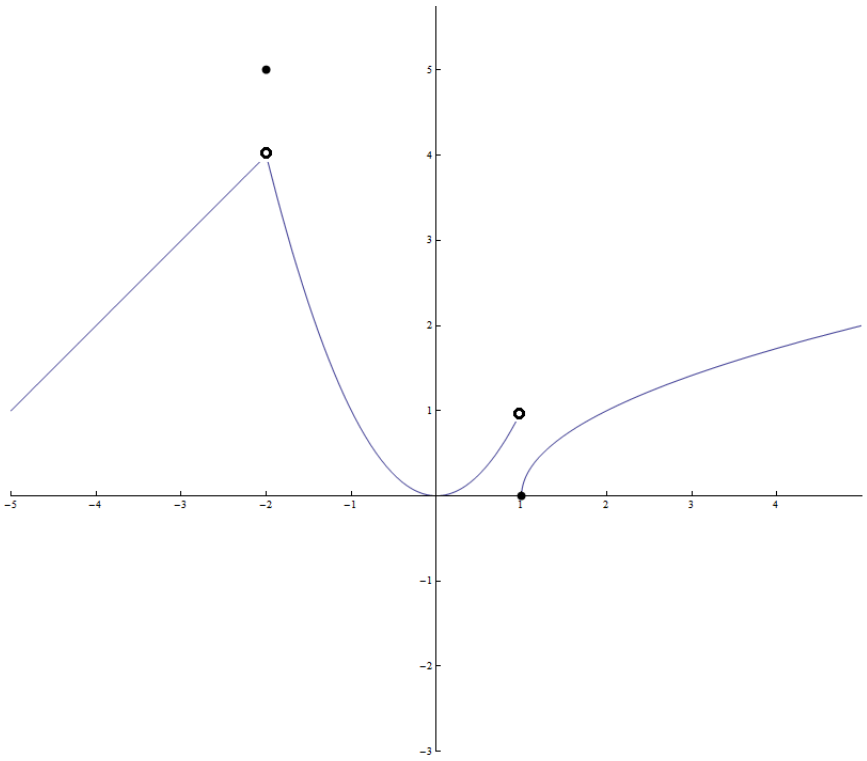
QUIZ 3 - MATH 112 Friday, January 27

YOUR NAME:_____ George Voutsadakis

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Consider the function $y = f(x)$ whose graph is sketched below: Find the following:



$f(-2) =$ $\quad$ $f(1) =$

$\lim_{x\to -2^-} f(x) =$ $\quad$ $\lim_{x\to 1^-} f(x) =$

$\lim_{x\to -2^+} f(x) =$ $\quad$ $\lim_{x\to 1^+} f(x) =$

$\lim_{x\to -2} f(x) =$ $\quad$ $\lim_{x\to 1} f(x) =$

2. Compute the following limits:

(a) $\lim_{x \to 3} \dfrac{x^2 + 1}{x - 1} =$

(b) $\lim_{x \to 2} \dfrac{x^2 + 5x - 14}{x^2 - x - 2} =$

(c) $\lim_{x \to 8} \dfrac{x - 8}{\sqrt{3x + 1} - 5} =$