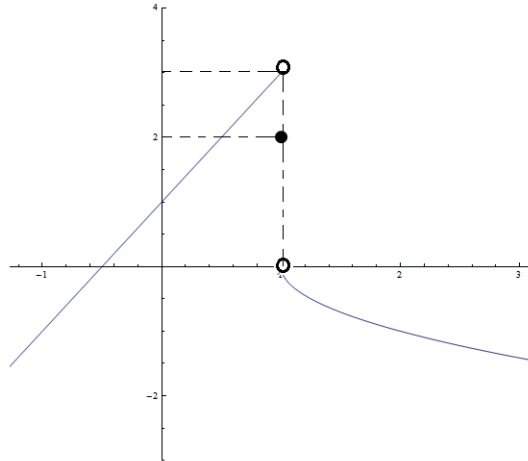


YOUR NAME: _____

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 depicted in the figure.



$$f(1) =$$

$$\lim_{x \rightarrow 1^-} f(x) =$$

$$\lim_{x \rightarrow 1^+} f(x) =$$

$$\lim_{x \rightarrow 1} f(x) =$$

2. Sketch the graph of the function $f(x) = \begin{cases} x + 3, & \text{if } x \leq -1 \\ -x^2 + 4, & \text{if } x > -1 \end{cases}$.

$$f(-1) =$$

$$\lim_{x \rightarrow -1^-} f(x) =$$

$$\lim_{x \rightarrow -1^+} f(x) =$$

$$\lim_{x \rightarrow -1} f(x) =$$