Calculus I	**Name:**
Study Guide 2	**Class:**
Due Date:	**Score:**

No Work $\Leftrightarrow$ No Points

Use Pencil Only $\Leftrightarrow$ Be Neat & Organized

1. (2 points) Evaluate: $\lim_{x \to 3}(x^3 - 27)$

1. _____

2. (2 points) Evaluate: $\lim_{x \to 4}(x - 2\sqrt{x})$

2. _____

3. (3 points) Evaluate: $\lim_{x \to -8}(\sqrt[3]{x} + x + 10)$

3. _____

4. (3 points) Evaluate: $\lim_{x \to 0}(1 + \sin x - \cos x)$

4. _____

5. (4 points) Evaluate: $\lim_{x \to 5} \dfrac{\sqrt{x^2 - 25} - x}{x^2}$

5. _____

6. (4 points) Evaluate: $\lim_{x \to 2} \dfrac{\dfrac{1}{x-1} - \dfrac{4}{x+2}}{x-2}$

6. _____

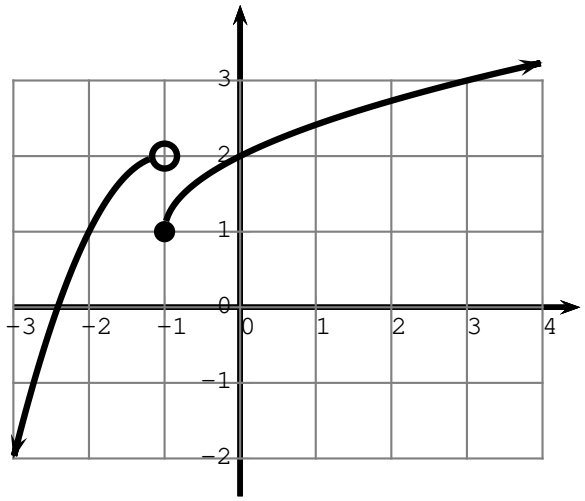
7. (4 points) Evaluate: $\lim_{x \to -10} \dfrac{x^2 - 100}{x + 10}$

7. _____

8. (4 points) Evaluate: $\lim_{x \to 10} \dfrac{x^3 - 1000}{x - 10}$

8. _____

9. Use the graph of the function $f(x)$ below to evaluate the following:



(a) (2 points) $\lim_{x \to 3^+} f(x)$.

(a) _____

(b) (2 points) $\lim_{x \to 3^-} f(x)$.

(b) _____

(c) (2 points) $\lim_{x \to 3} f(x)$.

(c) _____

(d) (2 points) $\lim_{x \to -1^+} f(x)$.

(d) _____

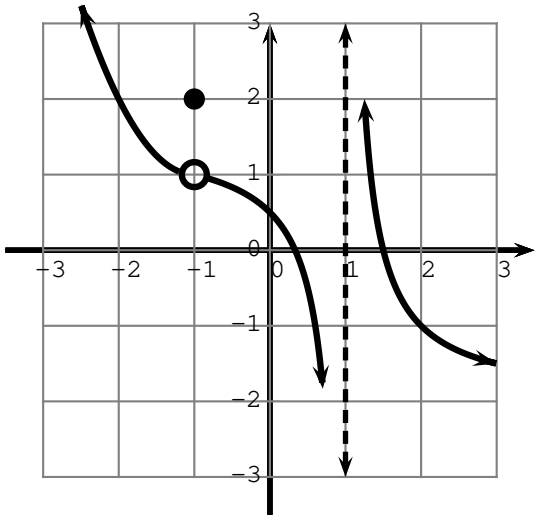
(e) (2 points) $\lim_{x \to -1^-} f(x)$.

(e) _____

(f) (2 points) $\lim_{x \to -1} f(x)$.

(f) _____

10. Use the graph of the function $f(x)$ below to evaluate the following:



(a) (2 points) $\lim_{x \to -1^+} f(x)$.

(a) _____

(b) (2 points) $\lim_{x \to -1^-} f(x)$.

(b) _____

(c) (2 points) $\lim_{x \to -1} f(x)$.

(c) _____

(d) (2 points) $f(-1)$.

(d) _____

(e) (2 points) $\lim_{x \to 1^+} f(x)$.

(e) _____

(f) (2 points) $\lim_{x \to 1^-} f(x)$.

(f) _____