

Name: _____

Math 1441 Quiz 2

1. (10 pts) Find the limit of the function $f(x)$, or explain why the limit does not exist.

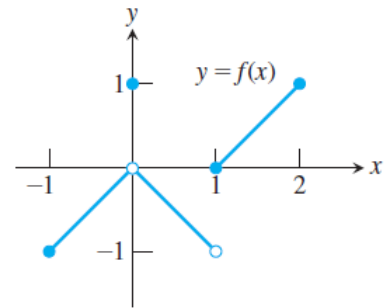
(1) $\lim_{x \rightarrow 0} f(x)$

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

(3) $\lim_{x \rightarrow 0.5} f(x)$

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

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



2. (6 pts) Find the limit. Justify your answer.

(1) $\lim_{x \rightarrow 1} (15x^3 - 25x^2 + x)$

(2) $\lim_{x \rightarrow -1} \frac{x^2 + x}{x^2 + 2x}$

3. (4 pts) Find the limit. Show your work.

$$\lim_{x \rightarrow 2} \frac{x^2 - 4x + 4}{x - 2}$$