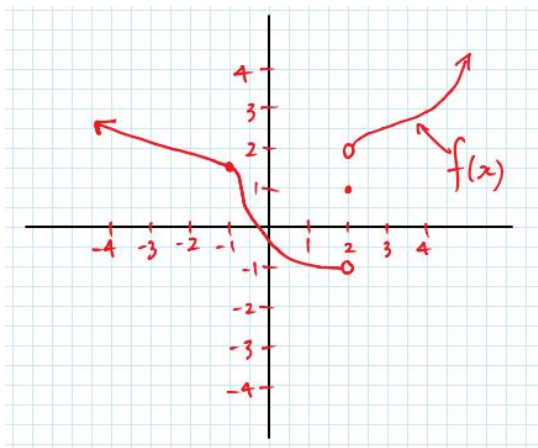


1.4 The Limit of a Function

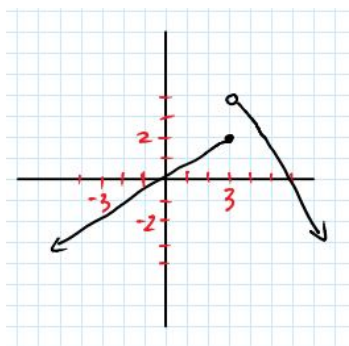
1. Given the sketch of the graph of $f(x)$, determine the following:

- a. $\lim_{x \rightarrow 1^-} (f(x))$ b. $\lim_{x \rightarrow 2^+} (f(x))$ c. $f(2)$ d. $\lim_{x \rightarrow 2^-} (f(x))$

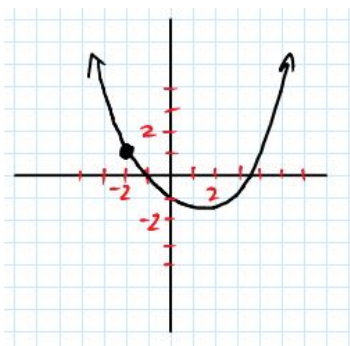


2. Using the given sketches, determine the limit (if it exists):

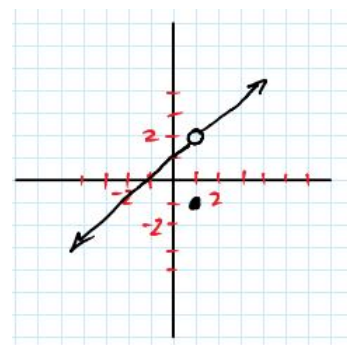
a. $\lim_{x \rightarrow 3} (f(x))$



b. $\lim_{x \rightarrow -2} (g(x))$



c. $\lim_{x \rightarrow 1} (h(x))$



3. Calculate the following limits:

a. $\lim_{x \rightarrow -1} (x^2 - 2x - 5)$

b. $\lim_{t \rightarrow 2} \left(\frac{3t - 6}{5t + 1} \right)$

c. $\lim_{x \rightarrow 4} (\sqrt{2x + 1})$

Answers to Selected Problems

1. d) -1 2. ASK for the answers 3. b) 0