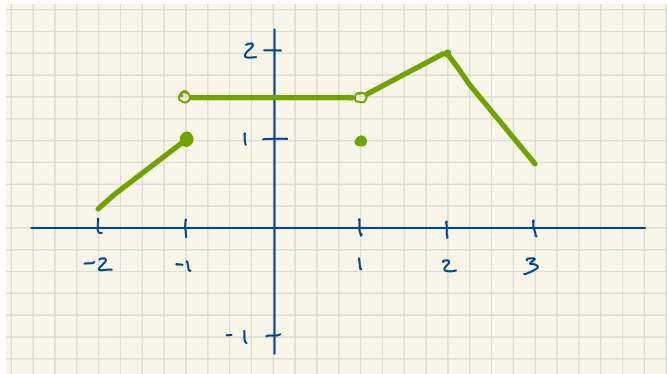


# Use the graph of $y = f(x)$ shown below to find the following

1.  $\lim_{x \rightarrow 1} f(x)$
2.  $f(1)$
3.  $f(-1)$
4.  $\lim_{x \rightarrow -1^-} f(x)$
5.  $\lim_{x \rightarrow -1^+} f(x)$
6.  $\lim_{x \rightarrow -1} f(x)$



Graph of  $y = f(x)$

$$\lim_{x \rightarrow 2} \frac{x^2 + x - 6}{x - 2} =$$

- (a) 0
- (b) Does not exist
- (c)  $\infty$
- (d) 5
- (e) 4

Let  $f(x) = x^2 + x$ . Then  $\lim_{h \rightarrow 0} \frac{f(2+h) - f(2)}{h} =$

- (a) 1
- (b) 5
- (c) Does not exist
- (d) 0
- (e) -3

Let  $f(x) = x^2 + x$ . Then  $\lim_{x \rightarrow 2} \frac{f(x) - 2}{x - 2} =$

- (a) 1
- (b) 5
- (c) Does not exist
- (d) 0
- (e) -3