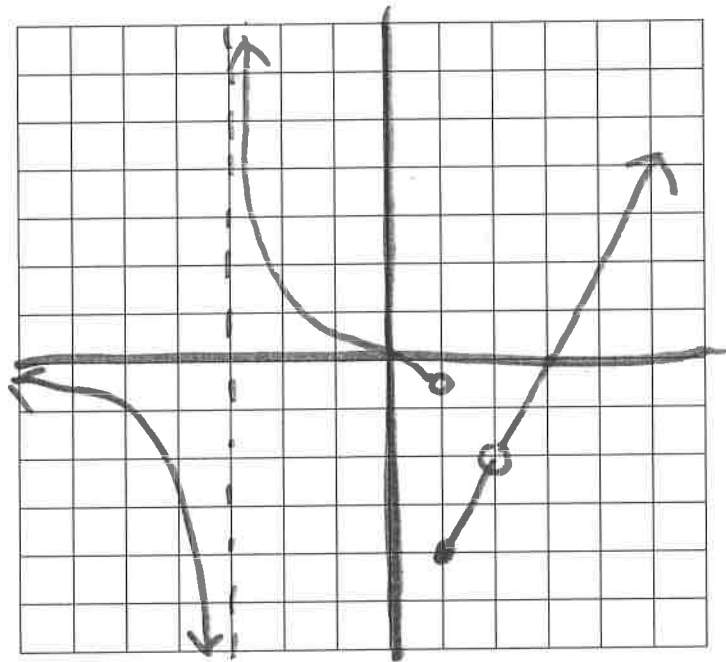


Given the graph of a function, find the requested values.

1)



$$f(1) = -4$$

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

$$\lim_{x \rightarrow 1^-} f(x) = -1.5$$

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

$$f(-3) = \infty$$

$$\lim_{x \rightarrow -3^+} f(x) = \infty$$

$$\lim_{x \rightarrow -3^-} f(x) = -\infty$$

$$\lim_{x \rightarrow -3} f(x) = \text{DNE}$$

$$f(2) = \infty$$

$$\lim_{x \rightarrow 2^+} f(x) = -2$$

$$\lim_{x \rightarrow 2^-} f(x) = -2$$

$$\lim_{x \rightarrow 2} f(x) = -2$$

$$f(0) = 0$$

$$\lim_{x \rightarrow 0^+} f(x) = 0$$

$$\lim_{x \rightarrow 0^-} f(x) = 0$$

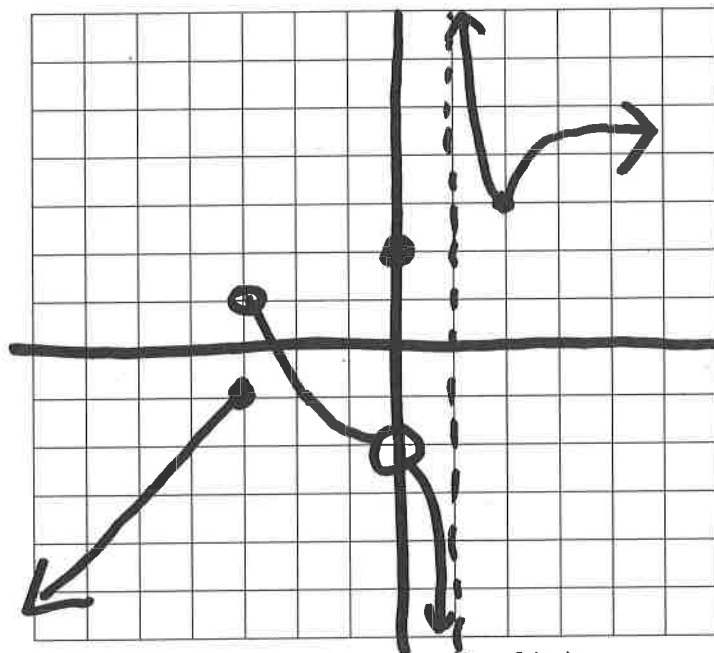
$$\lim_{x \rightarrow 0} f(x) = 0$$

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

$$\lim_{x \rightarrow -\infty} f(x) = 0$$

Given the graph of a function, find the requested values.

1)



$$f(1) = 2$$

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

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

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

$$f(-3) = -1$$

$$\lim_{x \rightarrow -3^+} f(x) = 1$$

$$\lim_{x \rightarrow -3^-} f(x) = -1$$

$$\lim_{x \rightarrow -3} f(x) = \text{DNE}$$

$$f(2) = 3$$

$$\lim_{x \rightarrow 2^+} f(x) = 3$$

$$\lim_{x \rightarrow 2^-} f(x) = 3$$

$$\lim_{x \rightarrow 2} f(x) = 3$$

$$f(0) = 2$$

$$\lim_{x \rightarrow 0^+} f(x) = -2$$

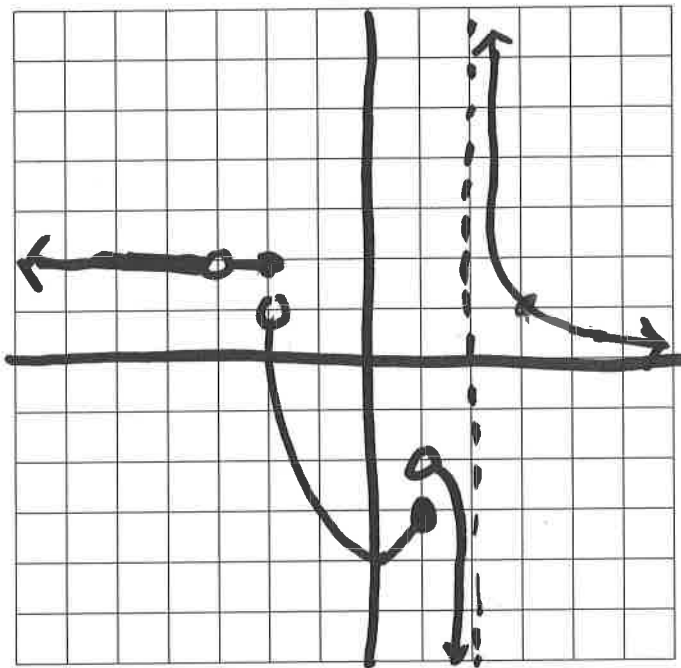
$$\lim_{x \rightarrow 0^-} f(x) = -2$$

$$\lim_{x \rightarrow 0} f(x) = -2$$

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

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

2)



HA:  $y=0$

$f(1) = -3$

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

$\lim_{x \rightarrow 1^-} f(x) = -3$

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

$f(-3) = \infty$

$\lim_{x \rightarrow -3^+} f(x) = 2$

$\lim_{x \rightarrow -3^-} f(x) = 2$

$\lim_{x \rightarrow -3} f(x) = 2$  ~~DNE~~

$f(2) = \infty$

$\lim_{x \rightarrow 2^+} f(x) = \infty$

$\lim_{x \rightarrow 2^-} f(x) = -\infty$

$\lim_{x \rightarrow 2} f(x) = \text{DNE}$

$f(3) = 1$

$\lim_{x \rightarrow 3^+} f(x) = 1$

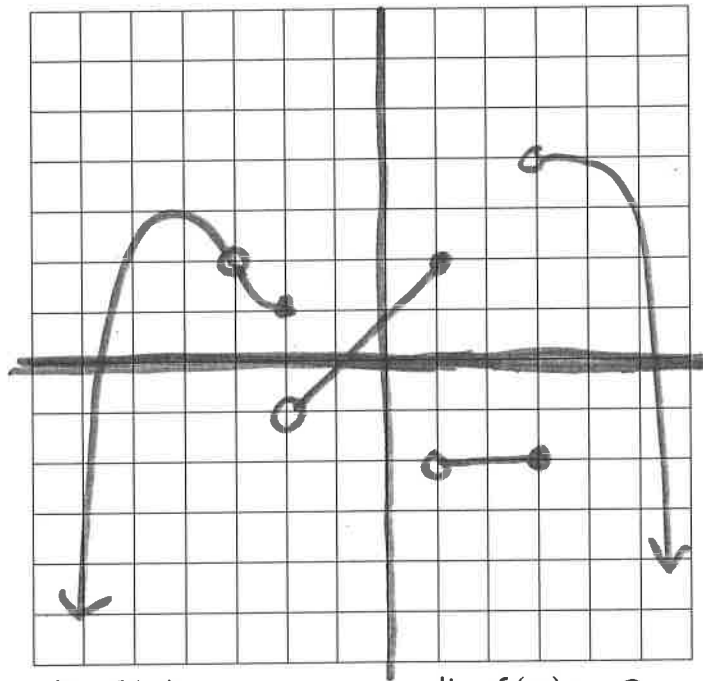
$\lim_{x \rightarrow 3^-} f(x) = 1$

$\lim_{x \rightarrow 3} f(x) = 1$

$\lim_{x \rightarrow \infty} f(x) = 0$

$\lim_{x \rightarrow -\infty} f(x) = 2$

2)



$$f(1) = 2$$

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

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

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

$$f(-3) = 2$$

$$\lim_{x \rightarrow -3^+} f(x) = 2$$

$$\lim_{x \rightarrow -3^-} f(x) = 2$$

$$\lim_{x \rightarrow -3} f(x) = 2$$

$$f(2) = -2$$

$$\lim_{x \rightarrow 2^+} f(x) = -2$$

$$\lim_{x \rightarrow 2^-} f(x) = -2$$

$$\lim_{x \rightarrow 2} f(x) = -2$$

$$f(3) = -2$$

$$\lim_{x \rightarrow 3^+} f(x) = 4$$

$$\lim_{x \rightarrow 3^-} f(x) = -2$$

$$\lim_{x \rightarrow 3} f(x) = \text{DNE}$$

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

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