

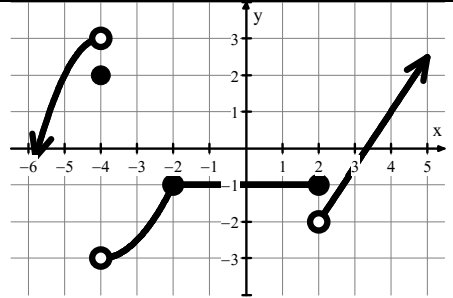
1.1 Limits Graphically

Calculus Name: _____

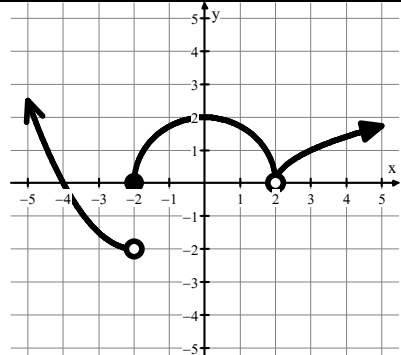
Corrective Assignment #2

Give the value of each statement. If the value does not exist, write "does not exist" or "undefined."

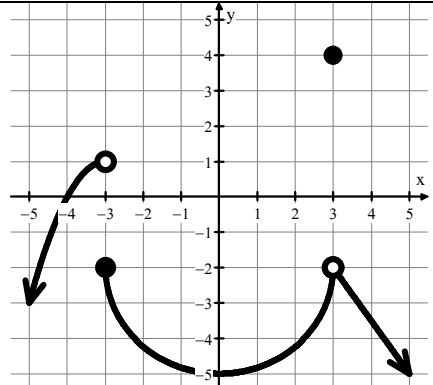
- 1.
- a. $\lim_{x \rightarrow -4} f(x) =$ b. $f(-4) =$ c. $\lim_{x \rightarrow -4^-} f(x) =$
- d. $\lim_{x \rightarrow -4^+} f(x) =$ e. $f(2) =$ f. $\lim_{x \rightarrow 2} f(x) =$
- g. $\lim_{x \rightarrow -2} f(x) =$ h. $\lim_{x \rightarrow 2^-} f(x) =$ i. $\lim_{x \rightarrow 2^+} f(x) =$



- 2.
- a. $\lim_{x \rightarrow 2^-} f(x) =$ b. $f(2) =$ c. $\lim_{x \rightarrow -2} f(x) =$
- d. $\lim_{x \rightarrow 2} f(x) =$ e. $f(0) =$ f. $\lim_{x \rightarrow -2} f(x) =$
- g. $\lim_{x \rightarrow -2^+} f(x) =$ h. $f(-2) =$

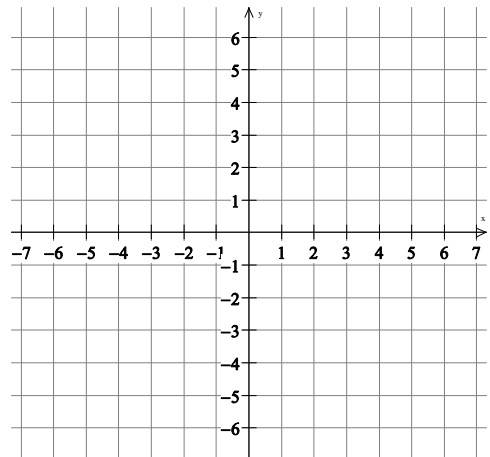


- 3.
- a. $\lim_{x \rightarrow 3^-} f(x) =$ b. $f(-3) =$ c. $\lim_{x \rightarrow -3^-} f(x) =$
- d. $\lim_{x \rightarrow -3^+} f(x) =$ e. $f(3) =$ f. $\lim_{x \rightarrow 3} f(x) =$
- g. $\lim_{x \rightarrow 3^+} f(x) =$ h. $\lim_{x \rightarrow -3} f(x) =$



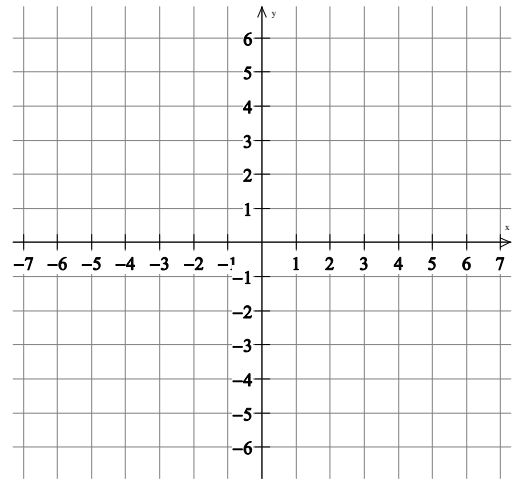
4. Sketch a graph of a function f that satisfies all of the following conditions.

- a. $f(1) = 2$
- b. $\lim_{x \rightarrow 1^-} f(x) = 4$
- c. $\lim_{x \rightarrow 1^+} f(x) = -3$
- d. f is increasing on $x < -4$
- e. $\lim_{x \rightarrow -4^-} f(x) < \lim_{x \rightarrow -4^+} f(x)$



5. Sketch a graph of a function g that satisfies all of the following conditions.

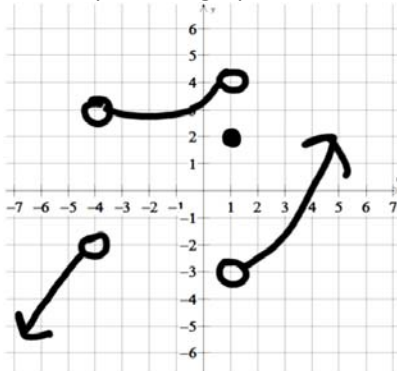
- $g(-3) = -4$
- $\lim_{x \rightarrow -3} g(x) = 2$
- g is constant on $-3 < x < 4$
- $\lim_{x \rightarrow 4^-} g(x) > \lim_{x \rightarrow 4^+} g(x)$
- g is decreasing on $x > 4$



Answers:

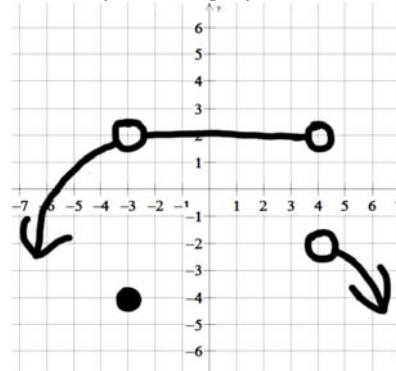
1a. DNE	b. 2	c. 3	d. -3	e. -1	f. DNE	g. -1	h. -1	i. -2
2a. 0	b. DNE	c. -2	d. 0	e. 2	f. DNE	g. 0	h. 0	
3a. -2	b. -2	c. 1	d. -2	e. 4	f. -2	g. -2	h. DNE	

4. One possible graph:



Double check that each condition is satisfied with your graph and it passes the vertical line test.

5. One possible graph:



Double check that each condition is satisfied with your graph and it passes the vertical line test.