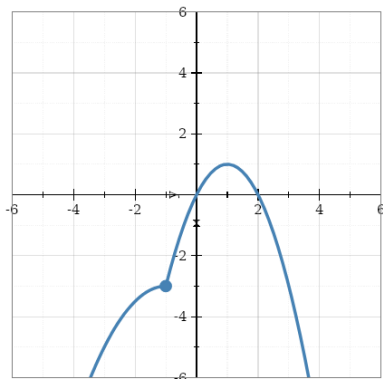


Evaluate limits from graphs

1

Use the graph to find the value $f(x)$ approaches as x approaches -1 from the left.



A

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

B

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

C

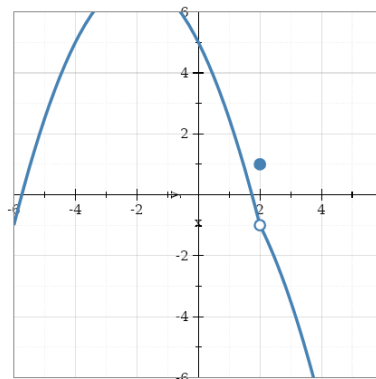
$$\lim_{x \rightarrow -1^-} f(x) = -2$$

D

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

2

Use the graph to evaluate the one-sided limit as x approaches 2 from the left.



A

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

B

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

C

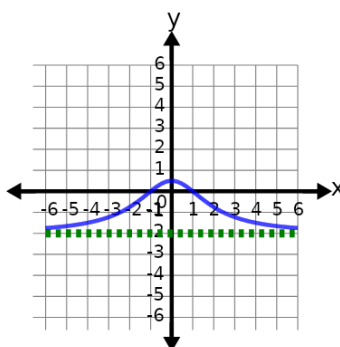
$$\lim_{x \rightarrow 2^-} f(x) = -2$$

D

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

3

What are the asymptotes of this graph?



A

Vertical asymptote at $x = -4$
Horizontal asymptote at $y = \frac{1}{2}$

B

Horizontal asymptote at $y = -2$

C

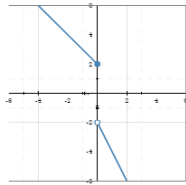
Horizontal asymptote at $y = 0$

D

Vertical asymptote at $x = -4$
Slant asymptote at $y = x - 5$

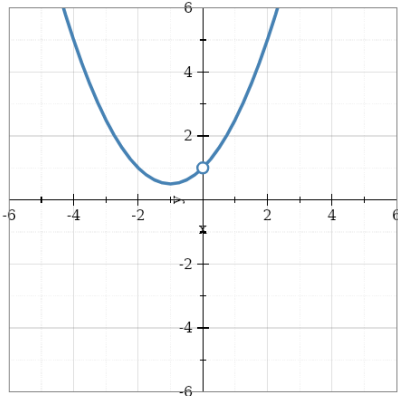


Evaluate limits from graphs

4Does the two-sided limit of this function exist at $x = 0$?

A Yes

B No

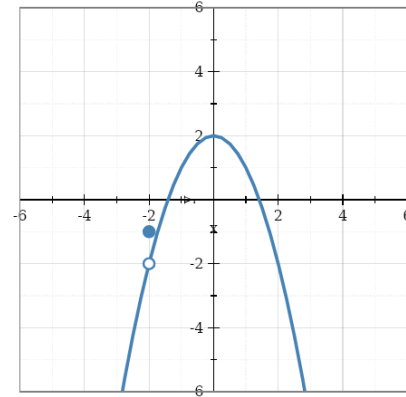
6Use the graph to evaluate $\lim_{x \rightarrow 0} f(x)$.

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

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

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

D $\lim_{x \rightarrow 0} f(x) = 3$

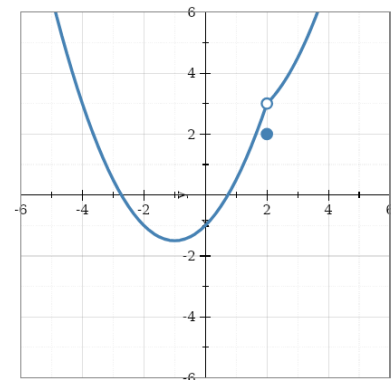
5Use the graph to evaluate $\lim_{x \rightarrow -2} f(x)$.

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

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

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

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

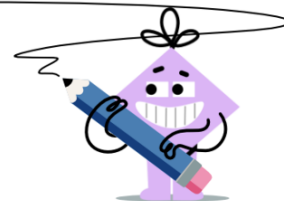
7Use the graph to evaluate $\lim_{x \rightarrow 2} f(x)$ (the two-sided limit).

A $\lim_{x \rightarrow 2} f(x) = 5$

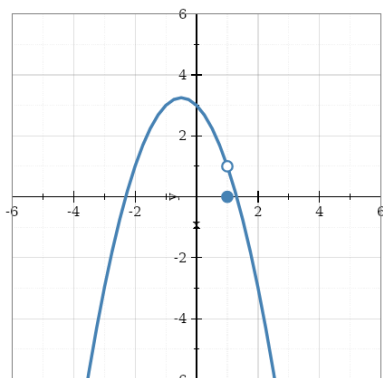
B $\lim_{x \rightarrow 2} f(x) = 2$

C $\lim_{x \rightarrow 2} f(x) = 4$

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



Evaluate limits from graphs

8Use the graph to find $\lim_{x \rightarrow 1} f(x)$ and the value $f(1)$.

A

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

B

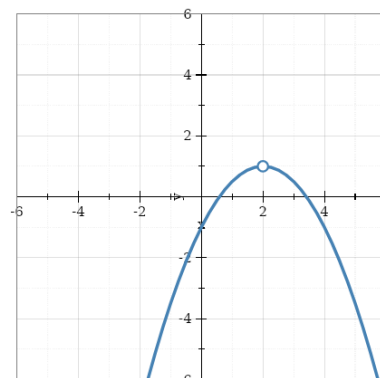
$$\lim_{x \rightarrow 1} f(x) = 1, f(1) = 0$$

C

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

D

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

9Use the graph to find the value $f(x)$ approaches as x gets closer to 2.

A

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

B

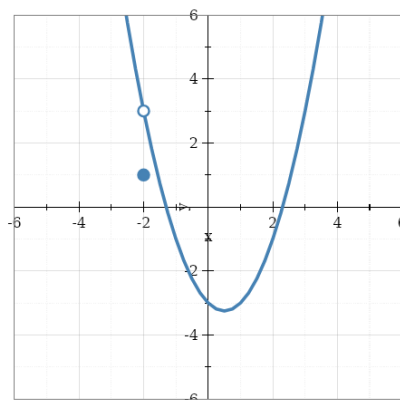
$$\lim_{x \rightarrow 2} f(x) = 2$$

C

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

D

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

10Use the graph to find the value $f(x)$ approaches as x approaches -2, and the value of $f(-2)$.

A

$$\lim_{x \rightarrow -2} f(x) = 3, f(-2) = 1$$

B

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

C

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

D

$$\lim_{x \rightarrow -2} f(x) = 1, f(-2) = 3$$