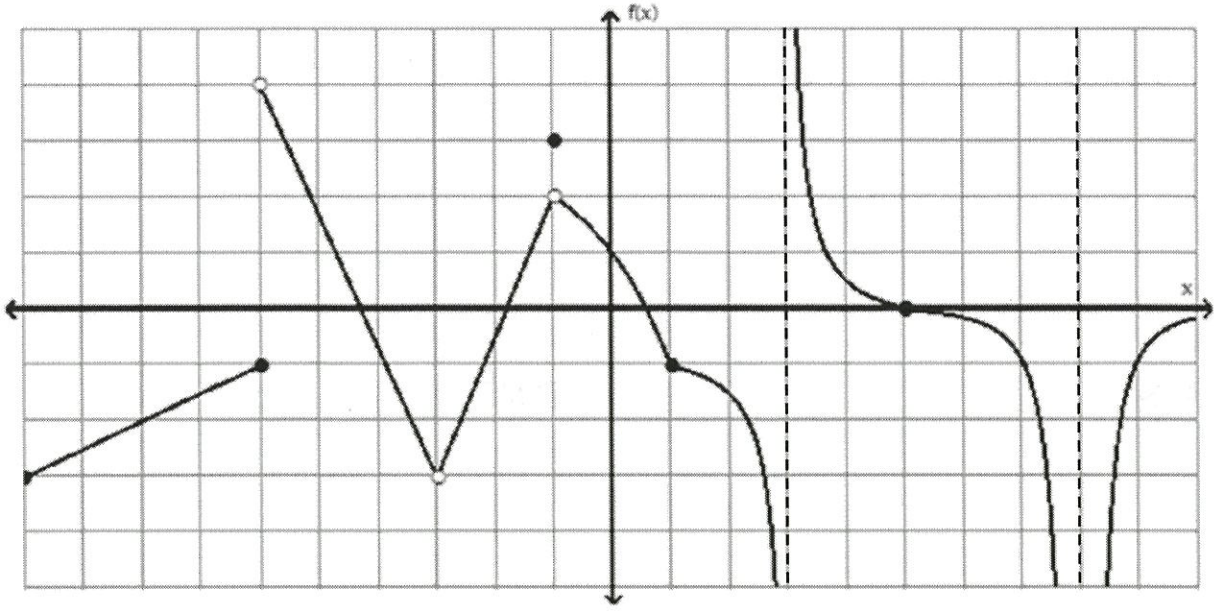
Pre-Calculus 12.1 More Practice Name: Key



Use the graph above to evaluate each limit, or if appropriate, indicate that the limit does not exist.

1. $\lim_{x\to -6^-} f(x)$ -1

2. $\lim_{x\to -6^+} f(x)$ 4

3. $\lim_{x\to -6} f(x)$ DNE

4. $\lim_{x\to -3^+} f(x)$ -3

5. $\lim_{x\to -3} f(x)$ -3

6. $\lim_{x\to -1^-} f(x)$ 2

7. $\lim_{x\to -1^+} f(x)$ 2

8. $\lim_{x\to -1} f(x)$ 2

9. $\lim_{x\to 1} f(x)$ -1

10. $\lim_{x\to 3^-} f(x)$ $-\infty$

11. $\lim_{x\to 3^+} f(x)$ ∞

12. $\lim_{x\to 3} f(x)$ DNE

13. $\lim_{x\to 8^+} f(x)$ $-\infty$

14. $\lim_{x\to 8} f(x)$ $-\infty$

Estimate each limit if it exists. Use your graphing calculator and table where needed.

1) $\lim_{x \to -4} \frac{-17}{x^2 + 8x + 16}$

$-\infty$

2) $\lim_{x \to 5} \frac{x^2}{x^2 - 10x + 25}$

∞

3) $\lim_{x \to 4} \frac{|x|}{x - 4}$

DNE

4) $\lim_{x \to \infty} x \cos x$

DNE

5) $\lim_{x \to -\infty} \frac{3^x + 3^{-x}}{3^x - 3^{-x}}$

-1

6) $\lim_{x \to 0} \frac{\sin |x|}{x}$

1

7) $\lim_{x \to 0} x^2 \cos \frac{1}{x}$

0

8) $\lim_{x \to -\infty} \frac{4x - 13}{2x + 8}$

2