

Introduction To Limits

Name _____



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

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

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

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

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

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

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

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

11. $\lim_{x \rightarrow 3^+} f(x)$

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

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

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

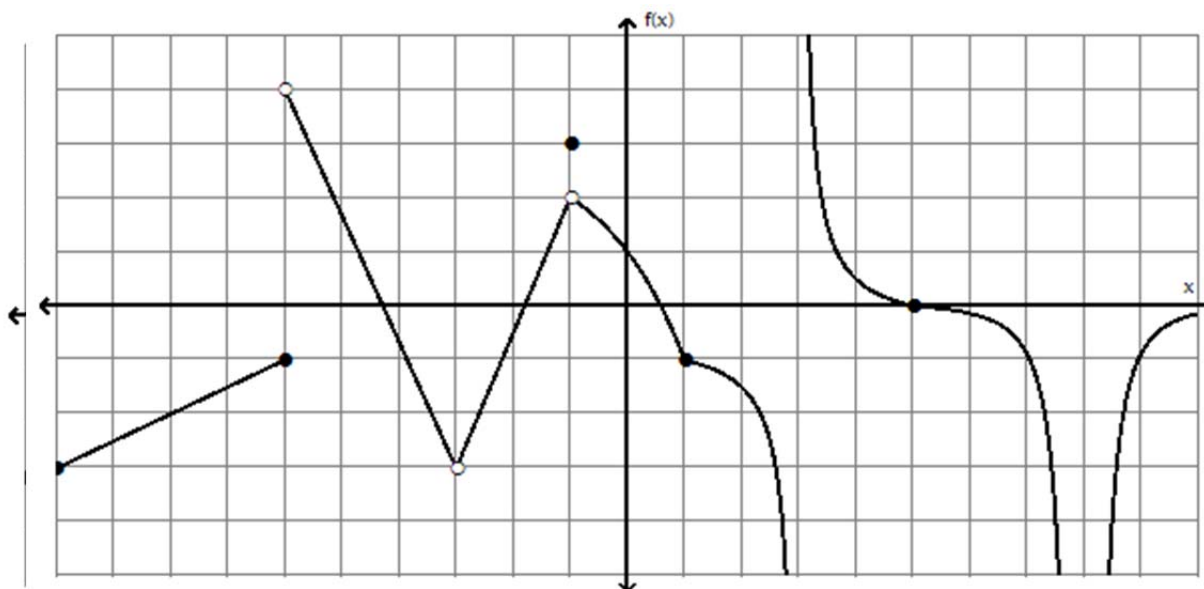
13. $\lim_{x \rightarrow 8^+} f(x)$

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

14. $\lim_{x \rightarrow 8} f(x)$

Introduction To Limits

Name Key



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

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|----|----------------------------------|-----------------------|-----|---------------------------------|-----------------------------|
| 1. | $\lim_{x \rightarrow -6^-} f(x)$ | -1 | 8. | $\lim_{x \rightarrow -1} f(x)$ | 2 |
| 2. | $\lim_{x \rightarrow -6^+} f(x)$ | 4 | 9. | $\lim_{x \rightarrow 1} f(x)$ | -1 |
| 3. | $\lim_{x \rightarrow -6} f(x)$ | does not exist | 10. | $\lim_{x \rightarrow 3^-} f(x)$ | $-\infty$ |
| 4. | $\lim_{x \rightarrow -3^+} f(x)$ | -3 | 11. | $\lim_{x \rightarrow 3^+} f(x)$ | $+\infty$ |
| 5. | $\lim_{x \rightarrow -3} f(x)$ | -3 | 12. | $\lim_{x \rightarrow 3} f(x)$ | does not exist |
| 6. | $\lim_{x \rightarrow -1^-} f(x)$ | 2 | 13. | $\lim_{x \rightarrow 8^+} f(x)$ | $-\infty$ |
| 7. | $\lim_{x \rightarrow -1^+} f(x)$ | 2 | 14. | $\lim_{x \rightarrow 8} f(x)$ | $-\infty$ |