

1 Finding Limits Graphically

$$1. \begin{cases} f(1) = \\ \lim_{x \rightarrow 1^-} f(x) = \\ \lim_{x \rightarrow 1^+} f(x) = \\ \lim_{x \rightarrow 1} f(x) = \end{cases}$$

$$4. \begin{cases} f(4) = \\ \lim_{x \rightarrow 4^-} f(x) = \\ \lim_{x \rightarrow 4^+} f(x) = \\ \lim_{x \rightarrow 4} f(x) = \end{cases}$$

$$7. \begin{cases} f(7) = \\ \lim_{x \rightarrow 7^-} f(x) = \\ \lim_{x \rightarrow 7^+} f(x) = \\ \lim_{x \rightarrow 7} f(x) = \end{cases}$$

$$2. \begin{cases} f(2) = \\ \lim_{x \rightarrow 2^-} f(x) = \\ \lim_{x \rightarrow 2^+} f(x) = \\ \lim_{x \rightarrow 2} f(x) = \end{cases}$$

$$5. \begin{cases} f(5) = \\ \lim_{x \rightarrow 5^-} f(x) = \\ \lim_{x \rightarrow 5^+} f(x) = \\ \lim_{x \rightarrow 5} f(x) = \end{cases}$$

$$3. \begin{cases} f(3) = \\ \lim_{x \rightarrow 3^-} f(x) = \\ \lim_{x \rightarrow 3^+} f(x) = \\ \lim_{x \rightarrow 3} f(x) = \end{cases}$$

$$6. \begin{cases} f(6) = \\ \lim_{x \rightarrow 6^-} f(x) = \\ \lim_{x \rightarrow 6^+} f(x) = \\ \lim_{x \rightarrow 6} f(x) = \end{cases}$$

2 Infinite Limits and Limits at Infinity

$$8. \begin{cases} g(8) = \\ \lim_{x \rightarrow 8^-} g(x) = \\ \lim_{x \rightarrow 8^+} g(x) = \\ \lim_{x \rightarrow 8} g(x) = \end{cases}$$

$$10. \begin{cases} g(10) = \\ \lim_{x \rightarrow 10^-} g(x) = \\ \lim_{x \rightarrow 10^+} g(x) = \\ \lim_{x \rightarrow 10} g(x) = \end{cases}$$

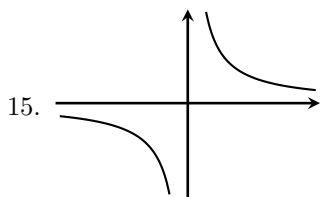
$$12. \begin{cases} g(12) = \\ \lim_{x \rightarrow 12^-} g(x) = \\ \lim_{x \rightarrow 12^+} g(x) = \\ \lim_{x \rightarrow 12} g(x) = \end{cases}$$

$$9. \begin{cases} g(9) = \\ \lim_{x \rightarrow 9^-} g(x) = \\ \lim_{x \rightarrow 9^+} g(x) = \\ \lim_{x \rightarrow 9} g(x) = \end{cases}$$

$$11. \begin{cases} g(11) = \\ \lim_{x \rightarrow 11^-} g(x) = \\ \lim_{x \rightarrow 11^+} g(x) = \\ \lim_{x \rightarrow 11} g(x) = \end{cases}$$

$$13. \lim_{x \rightarrow -\infty} g(x) =$$

$$14. \lim_{x \rightarrow +\infty} g(x) =$$



$$f(x) = 1/x$$

$$f(0) =$$

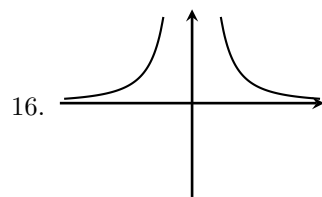
$$\lim_{x \rightarrow 0^-} f(x) =$$

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

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

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

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



$$f(x) = 1/x^2$$

$$f(0) =$$

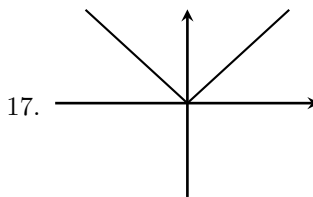
$$\lim_{x \rightarrow 0^-} f(x) =$$

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

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

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

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



$$f(x) = |x|$$

$$f(0) =$$

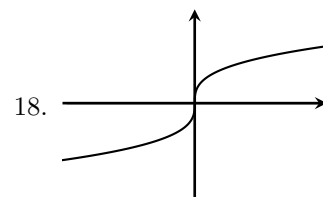
$$\lim_{x \rightarrow 0^-} f(x) =$$

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

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

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

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



$$f(x) = \sqrt[3]{x}$$

$$f(0) =$$

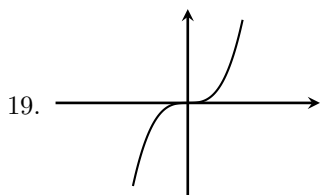
$$\lim_{x \rightarrow 0^-} f(x) =$$

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

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

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

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



$$f(x) = x^3$$

$$f(0) =$$

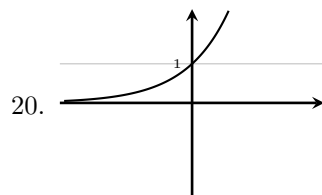
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$$\lim_{x \rightarrow 0^+} f(x) =$$

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

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

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



$$f(x) = e^x$$

$$f(0) =$$

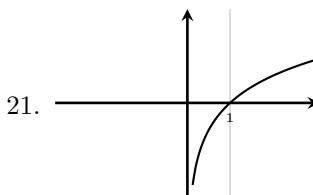
$$\lim_{x \rightarrow 0^-} f(x) =$$

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

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

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

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



$$f(x) = \ln(x)$$

$$f(0) =$$

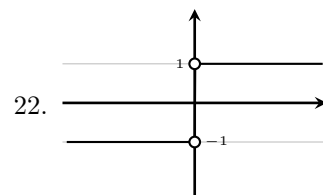
$$\lim_{x \rightarrow 0^-} f(x) =$$

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

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



$$f(x) = \frac{|x|}{x}$$

$$f(0) =$$

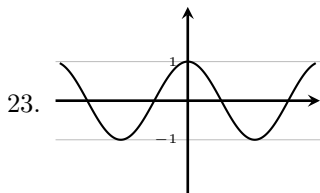
$$\lim_{x \rightarrow 0^-} f(x) =$$

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

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

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

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



$$f(x) = \cos(x)$$

$$f(0) =$$

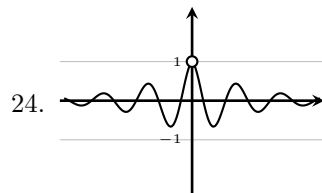
$$\lim_{x \rightarrow 0^-} f(x) =$$

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

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

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



$$f(x) = \frac{\sin(x)}{x}$$

$$f(0) =$$

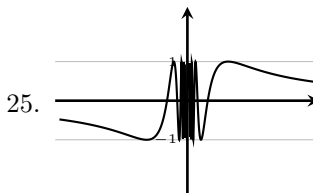
$$\lim_{x \rightarrow 0^-} f(x) =$$

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

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



$$f(x) = \sin(1/x)$$

$$f(0) =$$

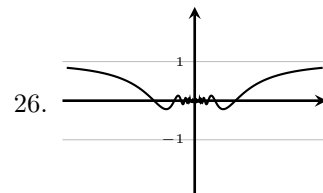
$$\lim_{x \rightarrow 0^-} f(x) =$$

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

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

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

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



$$f(x) = x \sin(1/x)$$

$$f(0) =$$

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

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

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

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

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