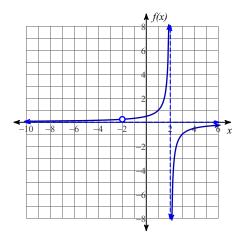
Worksheet 2 - Limits I

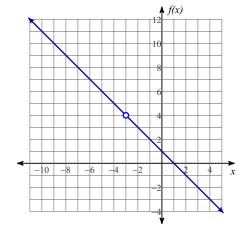
Period

Evaluate each limit.

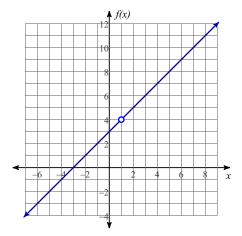
1)
$$\lim_{x \to -2} -\frac{x+2}{x^2-4}$$



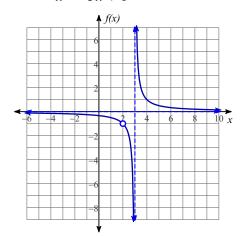
2)
$$\lim_{x \to -3} -\frac{x^2 + 2x - 3}{x + 3}$$



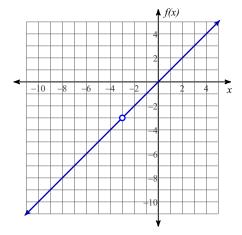
3)
$$\lim_{x \to 1} \frac{x^2 + 2x - 3}{x - 1}$$



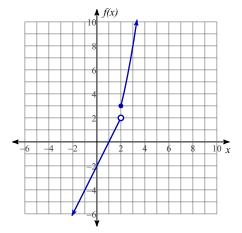
4)
$$\lim_{x\to 2} \frac{x-2}{x^2-5x+6}$$



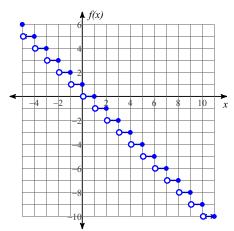
$$5) \lim_{x \to -3} \frac{x^2 + 3x}{x + 3}$$



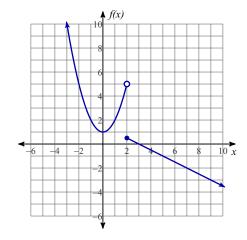
6)
$$\lim_{x \to 2^+} f(x), f(x) = \begin{cases} 2x - 2, & x < 2 \\ x^2 - 1, & x \ge 2 \end{cases}$$



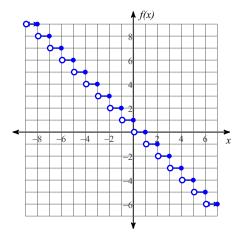
$$7) \lim_{x \to 3^{-}} \left[-x + 1 \right]$$



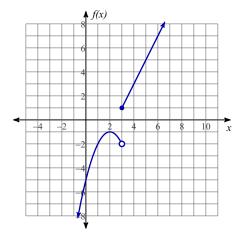
8)
$$\lim_{x \to 2^{-}} f(x), f(x) = \begin{cases} x^2 + 1, & x < 2 \\ -\frac{x}{2} + \frac{3}{2}, & x \ge 2 \end{cases}$$



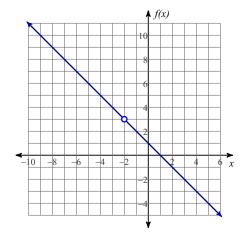
$$9) \lim_{x \to -1^-} \left[-x + 1 \right]$$



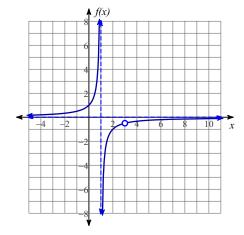
10)
$$\lim_{x \to 3^{-}} f(x), f(x) = \begin{cases} -x^2 + 4x - 5, & x < 3 \\ 2x - 5, & x \ge 3 \end{cases}$$



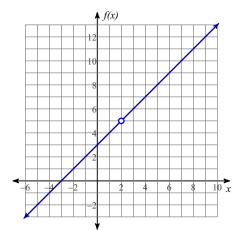
11)
$$\lim_{x \to -2} -\frac{x^2 + x - 2}{x + 2}$$



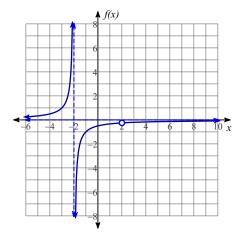
12)
$$\lim_{x \to 3} -\frac{x-3}{x^2-4x+3}$$



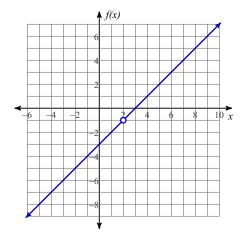
13)
$$\lim_{x \to 2} \frac{x^2 + x - 6}{x - 2}$$



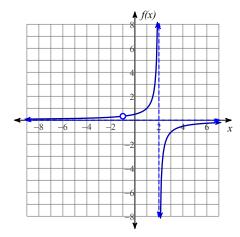
14)
$$\lim_{x\to 2} -\frac{x-2}{x^2-4}$$



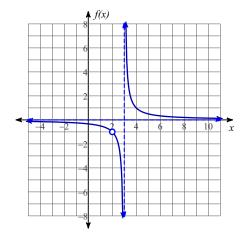
15)
$$\lim_{x \to 2} \frac{x^2 - 5x + 6}{x - 2}$$



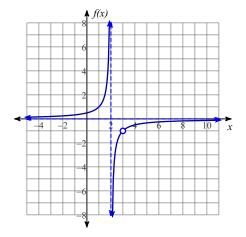
16)
$$\lim_{x \to -1} -\frac{x+1}{x^2 - x - 2}$$



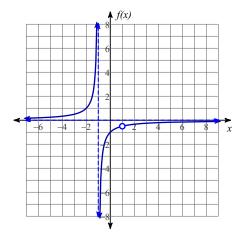
17)
$$\lim_{x \to 3} \frac{x - 2}{x^2 - 5x + 6}$$



18)
$$\lim_{x \to 3} -\frac{x-3}{x^2-5x+6}$$



19)
$$\lim_{x \to 1} -\frac{x-1}{x^2-1}$$



$$20) \lim_{x \to -3} \frac{x+1}{x^2 + 6x + 9}$$

