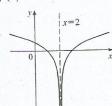
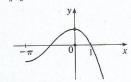
15. f(2) não está definido. 17. $\lim_{x \to a} f(x)$ não existe.

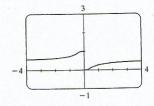


- 19. $\lim_{x \to 0} f(x) \neq f(0)$
- **21.** $\{x \mid x \neq -\frac{1}{2}, \frac{1}{3}\}$

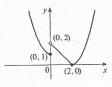


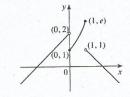
- **23.** $\left[\frac{1}{2}, \infty\right)$
- **25.** $(-\infty, \infty)$
- **27.** $(-∞, -1) \cup (1, ∞)$

29. x = 0



- 31. $\frac{7}{3}$
- 37. 0, à esquerda
- 39. 0, à direita; 1, à esquerda

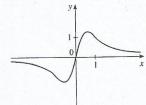


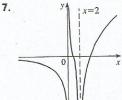


- **43.** (a) $g(x) = x^3 + x^2 + x + 1$ (b) $g(x) = x^2 + x$
- **51.** (b) (0,44, 0,45)
- 53. (b) 70,347
- 59. Nenhum
- 61. Sim

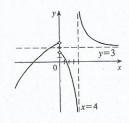
EXERCÍCIOS 2.6 PÁGINA 127

- 1. (a) Quando x se torna grande, f(x) tende a 5. (b) Quando x se torna um negativo grande (em módulo), f(x)tende a 3.
- 3. (a) ∞
- (b) ∞ (c) $-\infty$ (d)1
- (e)2
- (f) x = -1, x = 2, y = 1, y = 2
- 5.





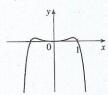
9.

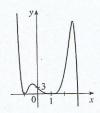


- 11. 0 13. $\frac{3}{2}$
- 15.0 17. $-\frac{1}{2}$ 19. $\frac{1}{2}$ 21. 2
- **23.** 3 **25.** $\frac{1}{6}$ **27.** $\frac{1}{2}(a-b)$ **29.** ∞ **33.** $-\frac{1}{2}$ **35.** 0 • **37.** (a), (b) $-\frac{1}{2}$
- **41.** y = 2; x = -2, x = 1
- **43.** x = 5
- **39.** y = 1, x = -4**45.** y = 3

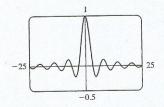
47.
$$f(x) = \frac{2-x}{x^2(x-3)}$$

- 49. -∞, -∞
- 51. $-\infty$, ∞

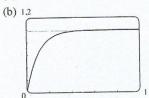




- **53.** (a) 0
- (b) Um número infinito de vezes



- **55.** (a) 0
- (b) ±∞
- **57.** 5
- **59.** (a) v^*

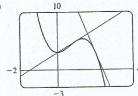


 $\approx 0.47 \text{ s}$

- **61.** $N \ge 15$
- **63.** $N \le -6, N \le -22$
- **65.** (a) x > 100

EXERCÍCIOS 2.7 = PÁGINA 136

- 1. (a) $\frac{f(x) f(3)}{f(x)}$
- (b) $\lim_{x \to 3} \frac{f(x) f(3)}{x 3}$
- 3. (a) 2 (b) y = 2x + 1 (c)
- 5. y = -x + 5
- 7. $y = \frac{1}{2}x + \frac{1}{2}$
- 9. (a) $8a 6a^2$
- (b) y = 2x + 3, y = -8x + 19



11. (a) À direita: 0 < t < 1 e 4 < t < 6; à esquerda: 2 < t < 3; permanecendo parado: 1 < t < 2 e 3 < t < 4