

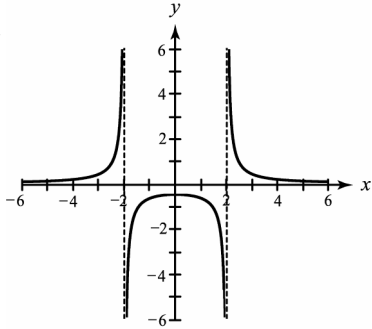
Chapter 6, Test Form A

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

2. (a) $f(-1) = -\frac{2}{3}$

(b) $\{x \mid x \neq 2, x \neq -2\}$

3.



4. -1

5. $\frac{x+3}{x-1}$

6. $\frac{x^2+9}{(x+3)^2}$

7. $3x^2$

8. $\frac{x^2+x+6}{(x-3)(x+3)}$

9. $\frac{2x-11}{(x-3)^2}$

10. $\frac{-2}{7x-4}$

11. $\frac{5}{2}$

12. -2

13. $\frac{7}{2}$

14. 21

15. $y = 6$

16. Direct variation; $y = 2.5x$

17. Inverse variation; $y = \frac{10}{x}$

18. $2a-1$

19. $3x^2 + 2x - 4 + \frac{9}{x+2}$

20. (a) $\frac{t}{4} + \frac{t}{3} = 1$

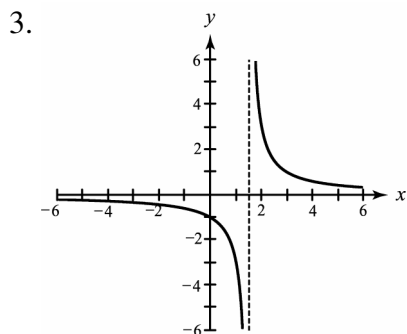
(b) $t = \frac{12}{7} \approx 1.7 \text{ hr}$

Chapter 6, Test Form B

1. $f(x) = \frac{x}{x+1}$

2. (a) $f(2) = 3$

(b) $\left\{x \mid x \neq \frac{3}{2}\right\}$



4. -1

5. $\frac{x-1}{2x-3}$

6. $\frac{(x-3)^2}{x^2+9}$

7. $\frac{2}{y^2}$

8. $\frac{3x^4-8y^3}{12xy}$

9. $\frac{x+1}{(x+7)^2}$

10. $\frac{2-x}{2x+3}$

11. $\frac{10}{3}$

12. -2, 7

13. $-\frac{11}{3}$

14. 2

15. $y = 8$

16. Inverse variation; $y = \frac{10}{x}$

17. Direct variation; $y = 3x$

18. $3+2x$

19. $2x^2 - 2x - 6 - \frac{6}{x-3}$

20. (a) $\frac{t}{6} + \frac{t}{5} = 1$

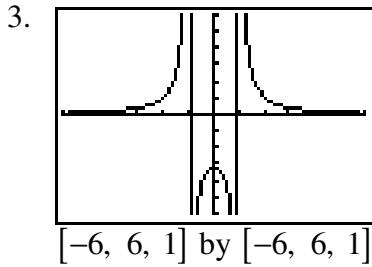
(b) $t = \frac{30}{11} \approx 2.7$ hr

Chapter 6, Test Form C

1. $f(x) = \frac{3.7}{x+2.1}$

2. (a) $f(3) = 0.4$

(b) $\{x \mid x \neq 1, x \neq -1\}$



4. -1

5. $\frac{2x+1}{x+3}$

6. $\frac{x^2+4}{(x-2)^2}$

7. $\frac{x}{4}$

8. $\frac{x^2-x+12}{(x-4)(x+4)}$

9. $\frac{2(x-3)}{(x-1)^2}$ or $\frac{2x-6}{(x-1)^2}$

10. $\frac{x-4}{2(2x-1)}$ or $\frac{x-4}{4x-2}$

11. $\frac{5}{6}$

12. -1, 4

13. $\frac{5}{9}$

14. 27.5

15. $y = \frac{28}{5}$

16. Inverse variation; $y = \frac{12}{x}$

17. Direct variation; $y = \frac{5}{2}x$

18. $4y^2 - 2y$

19. $2x^2 - 2x + 8 - \frac{35}{x+4}$

20. (a) $\frac{t}{10} + \frac{t}{12} = 1$

(b) $t = \frac{60}{11} \approx 5.5$ hr

Chapter 6, Test Form D

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|--------|---------|---------|---------|
| 1. (d) | 6. (b) | 11. (c) | 16. (b) |
| 2. (a) | 7. (d) | 12. (d) | 17. (a) |
| 3. (b) | 8. (d) | 13. (d) | 18. (b) |
| 4. (a) | 9. (d) | 14. (a) | 19. (b) |
| 5. (c) | 10. (b) | 15. (a) | 20. (c) |