MODULE 9 Rational Expressions and Equations

LESSON 9-1

Practice and Problem Solving: A/B

1. $x \neq 0,\ x \neq 7$
2. $x \neq 3$
3. $\frac{2(x-2)}{7x};\ x \neq 0,\ 4$
4. $\frac{5x-4}{6(x-2)};\ x \neq 2, -2$
5. $\frac{9x^2}{7x-9};\ x \neq \frac{9}{7}, -1$
6. $\frac{2x-3}{7};\ x \neq 8$
7. $\frac{6x-8}{x+4};\ x \neq -4$
8. $\frac{-2x+14}{2x-5};\ x \neq \frac{5}{2}$
9. $\frac{2x^2+7x+4}{x^2-x-12};\ x \neq 4,\ x \neq -3$
10. $\frac{2x^2-5x-7}{x^2-3x-18};\ x \neq 6,\ x \neq -3$
11. $\frac{x^2-4x+2}{(x-5)(x+3)}$; x ≠ 5 or -3
12. $\frac{-2x^2-3x+6}{x^2-7x-18};\ x \neq -2,\ x \neq 9$
13. $2.6\overline{6}$ packages per hour

LESSON 9-2

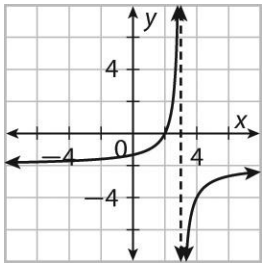
Practice and Problem Solving: A/B

1. $\frac{6}{5x};\ x \neq 0$
2. $\frac{16x^2}{3}$; None
3. $\frac{7x^2}{x+9};\ x \neq -9, -7$
4. $7x;\ x \neq 0,\ 9$
5. $\frac{1}{x+2};\ x \neq -2,\ 2$
6. $-10;\ x \neq -\frac{8}{5},\ \frac{7}{3}$
7. $\frac{6}{5x};\ x \neq 0$
8. $\frac{6}{x-1};\ x \neq 1,\ 2,\ 10$
9. $\frac{10}{7x};\ x \neq -3,\ 0$
10. $\frac{9}{x-3};\ x \neq -\frac{1}{3},\ 3$
11. $\frac{4}{5x^2(x-9)};\ x \neq -\frac{7}{3},\ 0,\ 9$
12. $\frac{7(x+10)}{6x^2};\ x \neq 0,\ \frac{5}{2}$
13. $1+\frac{At}{2v_0}$

LESSON 9-3

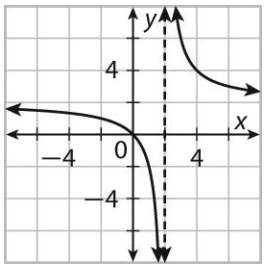
Practice and Problem Solving: A/B

1. Excluded value: $x = 3$; $-\frac{2}{x-3} - 2 = 0$;



$x = 2$

2. Excluded value: $x = 2$; $\frac{4}{x-2} + 2 = 0$;



$x = 0$

3. $12x^2$

4. $(x + 1)(x + 2)$

5. $x = 1$

6. $x = \frac{3}{2}$

7. $x = 1$

8. no solution

9. about 45.5 mph