

LESSON
9-1**Adding and Subtracting Rational Expressions****Practice and Problem Solving: A/B**

Identify the excluded values for each expression.

1. $\frac{x-7}{9x^2-63x}$

2. $\frac{x^2+3x-18}{-x^2+6x-9}$

Simplify the given expression stating any excluded values.

3. $\frac{2x^2-12x+16}{7x^2-28x}$

4. $\frac{5x^2+6x-8}{6x^2-24}$

5. $\frac{9x^3+9x^2}{7x^2-2x-9}$

6. $\frac{2x^2+13x-24}{7x+56}$

Add or subtract. Identify any x -values for which the expression is undefined.

7. $\frac{2x-3}{x+4} + \frac{4x-5}{x+4}$

8. $\frac{x+12}{2x-5} - \frac{3x-2}{2x-5}$

9. $\frac{x+4}{x^2-x-12} + \frac{2x}{x-4}$

10. $\frac{3x^2-1}{x^2-3x-18} - \frac{x+2}{x-6}$

11. $\frac{x+2}{x^2-2x-15} + \frac{x}{x+3}$

12. $\frac{x+6}{x^2-7x-18} - \frac{2x}{x-9}$

LESSON
9-1

Adding and Subtracting Rational Expressions

Practice and Problem Solving: C

Identify the excluded values for each expression.

1. $\frac{7x^2 - 47x + 30}{3x^2 - 24x + 36}$

2. $\frac{2x^3 - 8x^2 - 64x}{5x^2 - 50x + 80}$

Simplify the given expression stating any excluded values.

3. $\frac{7x - 21}{15x^2 - 18x - 81}$

4. $\frac{6x^3 - 24x}{10x^3 + 2x^2 - 12x}$

5. $\frac{7x^2 - 14x + 7}{2x^2 - 4x + 2}$

6. $\frac{10x^3 + 60x^2}{15x^2 + 105x + 90}$

Add or subtract. Identify any x-values for which the expression is undefined.

7. $\frac{5x - 1}{x + 3} + \frac{3x}{2x + 6}$

8. $\frac{7x}{3x^2} - \frac{2}{x + 4}$

9. $\frac{x}{x - 4} + \frac{x + 1}{3x + 1}$

10. $\frac{3}{x - 5} - \frac{1}{x^2 - 7x + 10}$

11. $\frac{x}{4x - 2} + \frac{3x + 3}{4x + 2}$

12. $\frac{3x}{x^2 - x - 6} - \frac{5}{x^2 - 8x + 15}$
