

8-5**Solving Rational Equations and Inequalities****Warm Up**

Find the least common multiple for each pair.

1. $2x^2$ and $4x^2 - 2x$
2. $x + 5$ and $x^2 - x - 30$

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

3. $\frac{1}{x-2} + \frac{1}{4x}$
4. $\frac{1}{x^2} - \frac{1}{x}$

8-6**Radical Expressions and Rational Exponents****Warm Up**

Simplify each expression.

1. $7^3 \cdot 7^2$
2. $\frac{11^8}{11^6}$
3. $(3^2)^3$
4. $\sqrt{75}$
5. $\frac{\sqrt{20}}{\sqrt{7}}$

8-5 Solving Rational Equations and Inequalities

Warm Up

Find the least common multiple for each pair.

1. $2x^2$ and $4x^2 - 2x$ $2x^2(2x - 1)$

2. $x + 5$ and $x^2 - x - 30$ $(x + 5)(x - 6)$

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

3. $\frac{1}{x - 2} + \frac{1}{4x}$ $\frac{5x - 2}{4x(x - 2)}$

4. $\frac{1}{x^2} - \frac{1}{x}$ $\frac{-(x - 1)}{x^2}; x \neq 0$

8-6 Radical Expressions and Rational Exponents

Warm Up

Simplify each expression.

1. $7^3 \cdot 7^2$ $16,807$

2. $\frac{11^8}{11^6}$ 121

3. $(3^2)^3$ 729

4. $\sqrt{75}$ $5\sqrt{3}$

5. $\frac{\sqrt{20}}{\sqrt{7}}$ $\frac{2\sqrt{35}}{7}$