

Name _____

Rational Expression Worksheet #14: Solving Equations

Solve each equation for x . SHOW WORK!

$$1.) \frac{-4x}{x-8} - \frac{11}{x-8} = \frac{25}{x-8}$$

$$2.) \frac{3}{4} - \frac{2x}{4x-24} = \frac{8}{x-6}$$

$$3.) \frac{3}{6x} - \frac{9}{12} = \frac{11}{4x}$$

$$4.) \frac{18}{5x+10} + \frac{4}{5} = \frac{-6}{x+2}$$

$$5.) \frac{12}{x^2+5x+6} + \frac{7}{x+3} = \frac{2}{x+2}$$

$$6.) \frac{1}{10} + \frac{4x}{5x} = \frac{-9}{2x}$$

$$7.) \frac{14}{2x-5} + \frac{7x}{2x-5} = \frac{63}{2x-5}$$

$$8.) \frac{2}{x-6} + \frac{7}{x+2} = \frac{4x+2}{x^2-4x-12}$$

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Rational Expression Worksheet Review #16 Adding/Subtracting/Solving

Add or subtract these rational expressions. Show your common denominators and numerators on this sheet or separate paper. **FACTOR** denominators when possible.

1. $\frac{3}{8x} - \frac{1}{4}$

2. $\frac{2}{6x-30} + \frac{7}{x-5}$

3. $\frac{7}{12} - \frac{4x}{3x}$

4. $\frac{3}{y+3} + \frac{2y}{y^2+8x+15}$

5. $\frac{5x}{x-7} + \frac{2x}{4x-28}$

6. $\frac{6}{y+8} - \frac{3y}{y^2+11x+24}$

Solve each equation for x . **SHOW WORK!**

7.) $\frac{3x}{x+7} - \frac{8}{x+7} = \frac{-23}{x+7}$

8.) $\frac{2}{5(x-8)} + \frac{4}{5} = \frac{6}{(x-8)}$