

Name : _____

Score : _____

Teacher : _____

Date : _____

Solving Rational Expressions

Solve each equation.

$$1) \quad \frac{1}{x} + \frac{8x - 7}{x^2 - 10x} = \frac{11x + 22}{x^2 - 10x}$$

$$6) \quad \frac{1}{x + 4} + \frac{1}{x^2 + 9x + 20} = \frac{3}{x + 4}$$

$$2) \quad \frac{1}{y^2} = \frac{1}{36}$$

$$7) \quad -2 + \frac{x^2 + 31x + 28}{6x} = \frac{7x - 8}{6x}$$

$$3) \quad \frac{1}{12b^2} = \frac{1}{6b^2} + \frac{1}{b}$$

$$8) \quad \frac{8}{x - 1} - \frac{1}{x^2 - 9x + 8} = \frac{1}{x - 1}$$

$$4) \quad \frac{1}{s} + \frac{8s + 10}{s^2 - 7s} = \frac{12s - 24}{s^2 - 7s}$$

$$9) \quad \frac{1}{n^2} = \frac{1}{64}$$

$$5) \quad \frac{d + 5}{24d^2} + \frac{7}{12d^2} = \frac{d + 11}{12d^2}$$

$$10) \quad \frac{1}{q} = \frac{12}{10q} - 3$$



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$$1) \quad \frac{1}{x} + \frac{8x - 7}{x^2 - 10x} = \frac{11x + 22}{x^2 - 10x}$$

$$\left\{ \frac{39}{-2} \right\}$$

$$2) \quad \frac{1}{y^2} = \frac{1}{36}$$

$$\{ \pm 6 \}$$

$$3) \quad \frac{1}{12b^2} = \frac{1}{6b^2} + \frac{1}{b}$$

$$\left\{ \frac{1}{-12} \right\}$$

$$4) \quad \frac{1}{s} + \frac{8s + 10}{s^2 - 7s} = \frac{12s - 24}{s^2 - 7s}$$

$$\{ 9 \}$$

$$5) \quad \frac{d + 5}{24d^2} + \frac{7}{12d^2} = \frac{d + 11}{12d^2}$$

$$\{ -3 \}$$

$$6) \quad \frac{1}{x + 4} + \frac{1}{x^2 + 9x + 20} = \frac{3}{x + 4}$$

$$\left\{ \frac{-9}{2} \right\}$$

$$7) \quad -2 + \frac{x^2 + 31x + 28}{6x} = \frac{7x - 8}{6x}$$

$$\{ -6 \}$$

$$8) \quad \frac{8}{x - 1} - \frac{1}{x^2 - 9x + 8} = \frac{1}{x - 1}$$

$$\left\{ \frac{57}{7} \right\}$$

$$9) \quad \frac{1}{n^2} = \frac{1}{64}$$

$$\{ \pm 8 \}$$

$$10) \quad \frac{1}{q} = \frac{12}{10q} - 3$$

$$\left\{ \frac{1}{15} \right\}$$

