

Name : _____ Score : _____

Teacher : _____ Date : _____

Solving Rational Expressions

Solve each equation.

1) $\frac{1}{d} = \frac{10}{7d} - 6$

6) $\frac{1}{8h^2} = \frac{1}{4h^2} - \frac{1}{h}$

2) $\frac{1}{14z^2} = \frac{1}{7z^2} + \frac{1}{z}$

7) $\frac{1}{p^2} = \frac{1}{64}$

3) $\frac{1}{24k^2} = \frac{1}{12k^2} + \frac{1}{k}$

8) $\frac{1}{r^2} = \frac{1}{81}$

4) $\frac{1}{c^2} = \frac{1}{25}$

9) $\frac{1}{x} + \frac{5x - 2}{x^2 + 10x} = \frac{11x - 22}{x^2 + 10x}$

5) $\frac{1}{n} + \frac{2n - 4}{n^2 + 7n} = \frac{8n - 16}{n^2 + 7n}$

10) $\frac{g + 3}{24g^2} + \frac{7}{12g^2} = \frac{g - 2}{12g^2}$

Name : _____ Score : _____

Teacher : _____ Date : _____

Solving Rational Expressions

Solve each equation.

$$1) \quad \frac{1}{d} = \frac{10}{7d} - 6$$

$$d = \frac{1}{14}$$

$$6) \quad \frac{1}{8h^2} = \frac{1}{4h^2} - \frac{1}{h}$$

$$h = \frac{1}{8}$$

$$2) \quad \frac{1}{14z^2} = \frac{1}{7z^2} + \frac{1}{z}$$

$$z = \frac{1}{-14}$$

$$7) \quad \frac{1}{p^2} = \frac{1}{64}$$

$$p = \pm 8$$

$$3) \quad \frac{1}{24k^2} = \frac{1}{12k^2} + \frac{1}{k}$$

$$k = \frac{1}{-24}$$

$$8) \quad \frac{1}{r^2} = \frac{1}{81}$$

$$r = \pm 9$$

$$4) \quad \frac{1}{c^2} = \frac{1}{25}$$

$$c = \pm 5$$

$$9) \quad \frac{1}{x} + \frac{5x - 2}{x^2 + 10x} = \frac{11x - 22}{x^2 + 10x}$$

$$6$$

$$5) \quad \frac{1}{n} + \frac{2n - 4}{n^2 + 7n} = \frac{8n - 16}{n^2 + 7n}$$

$$n = \frac{19}{5}$$

$$10) \quad \frac{g + 3}{24g^2} + \frac{7}{12g^2} = \frac{g - 2}{12g^2}$$

$$g = 21$$