

Name:

Date: Score:

Adding and Subtracting Rational Expressions Worksheet

1 $\frac{x^2 + 3x - 2}{(x + 5)(x - 2)} + \frac{4x + 12}{(x + 5)(x - 2)}$

2 $\frac{10}{3x - 7} - \frac{5}{7 - 3x}$

3 $\frac{3x}{2x + 6} - \frac{x - 3}{x + 3}$

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

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

6 $\frac{5}{x^2 - 5x} - \frac{x}{5x - 25}$

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

8 $\frac{5x + 5}{5x^2 + 35x - 40} + \frac{7x}{3x}$

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Answers

$$1 \quad \frac{x^2 + 3x - 2}{(x + 5)(x - 2)} + \frac{4x + 12}{(x + 5)(x - 2)}$$

$$\frac{x + 2}{x - 2}$$

$$2 \quad \frac{10}{3x - 7} - \frac{5}{7 - 3x}$$

$$\frac{15}{3x - 7}$$

$$3 \quad \frac{3x}{2x + 6} - \frac{x - 3}{x + 3}$$

$$\frac{x + 6}{2(x + 3)}$$

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

$$\frac{x^2 - 5x - 10}{(x - 3)(x + 5)}$$

$$5 \quad \frac{6}{x - 2} + \frac{x + 3}{2 - x}$$

$$-\frac{x + 3}{x - 2}$$

$$6 \quad \frac{5}{x^2 - 5x} - \frac{x}{5x - 25}$$

$$-\frac{(x + 5)}{5x}$$

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

$$\frac{2(x + 8)}{(x + 2)(x - 2)}$$

$$8 \quad \frac{5x + 5}{5x^2 + 35x - 40} + \frac{7x}{3x}$$

$$\frac{7x^2 + 52x - 53}{3(x + 8)(x - 1)}$$