Math on the Fly!

NAME: _____ DATE: _____

Adding and Subtracting Rational Expressions

Simplify each expression below.

1. $\dfrac{5x-6}{11} + \dfrac{7-3x}{11}$

2. $\dfrac{9x+2}{4x} - \dfrac{4x+9}{4x}$

3. $\dfrac{1}{2} + \dfrac{2x}{3}$

4. $\dfrac{7}{x} - \dfrac{5}{6}$

5. $\dfrac{1}{y} + \dfrac{2}{5x}$

6. $\dfrac{4}{5x+10} - \dfrac{1}{x^2-2x-8}$

7. $\dfrac{3}{4x-4} + \dfrac{2}{3x-3}$

8. $\dfrac{-5}{x+4} + \dfrac{6}{x^2-16}$

9. $\dfrac{1}{x^2+x-6} - \dfrac{1}{x^2-4x+4}$

SOLUTIONS

1. $\dfrac{2x + 1}{11}$

2. $\dfrac{5x - 7}{4x}$

3. $\dfrac{4x + 3}{6}$

4. $\dfrac{42 - 5x}{6x}$

5. $\dfrac{5x + 2y}{5xy}$

6. $\dfrac{4x - 21}{5(x - 4)(x + 2)}$

7. $\dfrac{17}{12(x - 1)}$

8. $\dfrac{-5x + 26}{(x + 4)(x - 4)}$

9. $\dfrac{-5}{(x + 3)(x - 2)(x - 2)}$