## Arithmetic with Polynomials - Worksheet 7

Simplify the following:

1. 
$$\frac{2x^2+3x}{x-2} \times \frac{x^2-4}{x+3}$$
.

6. 
$$\frac{3x+6}{x^3-x} \times \frac{x}{x^2+x-2}$$
.

$$2. \ \frac{x+1}{x-2} + \frac{x-4}{x+3}.$$

7. 
$$\frac{x}{x-2} + \frac{x+2}{x+1}$$
.

3. 
$$\frac{x^2-3x}{x^2+2x+1} \div \frac{x}{x+1}$$
.

$$8. \ \frac{3x+7}{2x} - \frac{x+4}{x-8}.$$

4. 
$$\frac{4x-8}{x^2-4} \times \frac{x+2}{4}$$
.

9. 
$$\frac{1}{x^2-9} + \frac{5}{x+3}$$
.

5. 
$$\frac{x^2+5x-6}{x^2-1} \times \frac{x+1}{x-1}$$
.

10. 
$$\frac{3x+2}{x^2-1} \div \frac{x}{x-1}$$
.

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