

Show work and circle your answers.

1. Simplify.

$$\frac{8x^4 + 48x^3 - 200x^2 - 1200x}{10x^4 + 110x^3 + 300x^2}$$

2. Find this difference.

$$\frac{5x}{3x^4 - 48x^2} - \frac{3}{9x^3 + 9x^2 - 108x}$$

3. Solve.

$$\frac{4x}{x+7} - \frac{42}{x^2 + 12x + 35} = \frac{3x}{x+5}$$