

## SECTION 4.3: DIVIDING POLYNOMIALS

Homework: \_\_\_\_\_

Learning Targets:

- 4a. Understanding of how to add, subtract, multiply, and divide polynomials.

Long Division

$$\begin{array}{r} 3x^3 - 7x^2 + 9x - 14 \\ \hline x - 2 \end{array}$$

Synthetic Division

$$\begin{array}{r} 3x^3 - 7x^2 + 9x - 14 \\ \hline x - 2 \end{array}$$

$$(22x^3 + 11x^2 + 4x + 12) \div (2x + 1)$$

$$(3x^3 - 8x^2 - 1) \div (x + 1)$$