

Name: _____
UNIT 1

Date: _____
LESSON 2

AIM: HOW DO WE DIVIDE POLYNOMIALS? (DAY 1)

Do Now: Use long division to find the quotient:

a. $5\sqrt{185}$

b. $11\sqrt{253}$

We will now apply the same process to divide polynomials!

1)
$$\begin{array}{r} 2x^2 + 5x + 3 \\ \hline x + 1 \end{array}$$

2)
$$\begin{array}{r} 2x^2 + x - 10 \\ \hline x - 2 \end{array}$$

DIVIDEND: _____

DIVISOR: _____

The answer to the division problem is called the _____

$$3) (x^2 - 2x - 15) \div (x + 3)$$

$$4) (2x^3 + x^2 - 16x + 15) \div (2x - 3)$$

PRACTICE:

$$5) (x^2 + 6x + 9) \div (x + 3)$$

$$6) \frac{x^3 + 2x^2 + 2x + 1}{x+1}$$

$$7) (7x^3 - 8x^2 - 13x + 2) \div (7x - 1)$$

$$8) \frac{2x^3 - 13x^2 - x + 3}{2x+1}$$