

3.3 Polynomial Division**Polynomial $\div$ Monomial (recall from Math 9)**

Ex.

$$\frac{4x+2}{2}$$

* turn into a series of monomial/monomial divisions

$$= \frac{4x}{2} + \frac{2}{2}$$

=

Ex. $\frac{6x^3-12x^2}{3x}$

Ex. $\frac{15x^3y^2-10xy^4+25x^4y^3}{-5xy^2}$

Polynomial $\div$ Binomial (Long Division)

Recall from grade ???

Ex. Solve by long division: $612 \div 5$

*note: $\frac{\text{dividend}}{\text{divisor}} = \text{quotient} + \frac{\text{remainder}}{\text{divisor}}$

Similar for polynomial division:

Ex. Solve:

$$6x^2 + 7x + 9 \div 2x + 1$$

$$-3x + 5 + x^2 \div x - 2$$

$$8x^2 + 11 - 6x \div 2x - 3$$

$$9m^2 - 5 \div 3m + 2$$

Practice: Worksheet (B-25/C-13)/ front on sheet; back work on separate sheet