

Starter  $x^2 \cdot x^2 = x \cdot x \cdot x \cdot x = x^4$  5 FEB 2018  
 Multiply and simplify.

1)  $(3x^2 - 3x + 2)(-4x^2 - 2x + 2)$

	$3x^2$	$-3x$	$2$
$-4x^2$	$-12x^4$	$12x^3$	$-8x^2$
$-2x$	$-6x^3$	$6x^2$	$-4x$
$2$	$6x^2$	$-6x$	$4$

$-12x^4 + 6x^3 + 4x^2 - 10x + 4$

Homework: Multiplying Polynomials. Draw the boxes if you choose to use them.

1)  $(5x - 8)(2x - 3)$

2)  $(n + 1)(n - 7)$

finish and turn  
in.

3)  $(3x - 7)(x - 2)$

4)  $(3d - 2)(-d^2 - 3d + 2)$

5)  $(x - 2)(x + 2)$

6) Find the area of the rectangle.

$(3x - 2) ft$

$(x - 2) ft$



Algebra 1 Notes  $x^2 = 1 \cdot x^2$  Name X. X  
 9.4 Factor Polynomials by GCF

What is a factor? an expression (# and/or variables) that multiplies with other expressions to form a product

What are the factors of 12?

1, 2, 3, 4, 6, 12

What are the factors of 7?

1, 7

What are the factors of  $5x^2y^2$ ?

1, 5,  $x$ ,  $x^2$ ,  $y$

What are the factors of  $15bc^3$ ?

1, 3, 5, 15,  $b$ ,  $c$ ,  $c^2$ ,  $c^3$

The examples above are what type of polynomial? monomials

Greatest Common Factor (GCF): the largest monomial that divides evenly into each term of the polynomial

Find the GCF of the following pairs of monomials:

1. 12 and 28

1, 2, 3, 4, 6, 12  
1, 2, 4, 7, 14, 28

2. ~~18~~ $x^2$  and  $42x^3$

3. 42 $x^2y$  and 28 $xy^4$

$x^2$

$xy$

1)  $(5x - 8)(2x - 3)$

2)  $(n + 1)(n - 7)$