

**Math II – Factoring Trinomials**

Name \_\_\_\_\_

Factor each trinomial (**standard form**) into the product of two binomials (**intercept form**).

**Example:  $x^2 + 14x + 45$**

What multiplies to 45?      1 and 45  
    3 and 15  
    5 and 9

Which of those pairs adds to 14?      5 and 9

**Answer:  $(x + 5)(x + 9)$**

$x^2 + 14x + 45$	$x^2 + 18x + 45$	$x^2 + 46x + 45$
$x^2 + 11x + 24$	$x^2 + 10x + 24$	$x^2 + 14x + 24$
$x^2 + 12x + 36$	$x^2 + 13x + 36$	$x^2 + 20x + 36$
$x^2 - 15x - 100$	$x^2 + 20x + 100$	$x^2 + 29x + 100$

$x^2 + 9x + 8$	$x^2 - 6x + 8$	$x^2 - 2x - 8$	$x^2 + 7x - 8$
$x^2 - 11x + 24$	$x^2 - 14x + 24$	$x^2 - 25x + 24$	$x^2 - 10x + 24$
$x^2 - 2x - 24$	$x^2 - 5x - 24$	$x^2 + 5x - 24$	$x^2 - 10x + 25$

**MIXED BAG – YOU GOT THIS**

$x^2 - 25$	$x^2 - 2x - 15$	$x^2 + 10x - 75$	$x^2 - 20x + 51$
$x^2 + 14x - 32$	$x^2 - 1$	$x^2 - 2x + 1$	$x^2 + 12x - 45$