

## Factoring Special Cases

### Factoring a Difference of Squares

Standard Form Equation	Factored Form Equation	y-Intercept	Zeros	Axis of Symmetry
$y = x^2 - 1$				
$y = x^2 - 4$				
$y = x^2 - 9$				
$y = x^2 - 16$				
$y = x^2 - 25$				
$y = x^2 - 36$				

What do all the differences of squares have in common?

**Factoring a Quadratic in the Form  $y = x^2 + bx$**

<b>Standard Form Equation</b>	<b>Factored Form Equation</b>	<b>y-Intercept</b>	<b>Zeros</b>	<b>Axis of Symmetry</b>
$y = x^2 - 5x$				
$y = x^2 - 2x$				
$y = x^2 - x$				
$y = x^2 + x$				
$y = x^2 + 2x$				
$y = x^2 + 7x$				

What do all of the relations in the table above have in common?