6-3 Trinomial Squares

We're going to factor these the same way we are going to factor regular trinomials.

Things to remember:

Start	End
$ax^2 + bx + c^2$	$(ax + c)(ax + c)$
$ax^2 - bx + c^2$	$(ax - c)(ax - c)$

In this section, it is easy.

a and c are perfect squares in this section.

Don't forget, Factor out a GCF if applicable!

Factor:

25
1 x 25
5 x 5

$x^2 + 10x + 25$

$(x+5)(x+5)$

$x^2+5x+5x+25$

or

$(x+5)^2$

$y^2 - 8y + 16$

$(y-4)(y-4)$

or

$(y-4)^2$

$16x^2 - 56x + 49$

$(4x-7)(4x-7)$

or

$(4x-7)^2$

GCF: 2

$8x^2 - 40x + 50$

$\frac{}{2} \quad \frac{}{2} \quad \frac{}{2}$

$2(4x^2-20x+25)$

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

or

$2(2x-5)^2$

$4x^2 + 12x + 9$

$(2x+3)(2x+3)$

or

$(2x+3)^2$

GCF: 2

$2x^2 + 12x + 18$

$\frac{}{2} \quad \frac{}{2} \quad \frac{}{2}$

$2(x^2+6x+9)$

$2(x+3)(x+3)$

or

$2(x+3)^2$