Unit 7 Day 9 Notes on Difference Of Two Squares

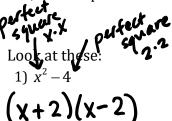
Key

Recall from the first part of the unit that in most cases, a product of two linear binomials yields a quadratic trinomial. $\mathbf{Q}\mathbf{Y}^2+\mathbf{6}\mathbf{X}+\mathbf{C}$

For example: $(x-1)(x+2) = x^2 + 2x - 1x - 2$

$$x^2 + x - 2$$

But, in one special case that doesn't happen: (x-2)(x+2) CONTUGATES!



$$x^{2}+2x-2x-4$$

 $x^{2}-4$
 $b\cdot b$
 $2) b^{2}-93\cdot 3$
 $(b+3)(b-3)$

$$w \cdot w \quad | \cdot |$$
3) $w^2 - 1$
 $(w+1)(w-1)$

To use D.O.T.S. we must have:

General Form: $a^2 - b^2 = (a + b)(a - b)$

Let's Practice! *Don't forget to pull out a GCF (if possible).*4) $4x^2-25$ 5) $5h^2-45$ **GCF!**

4)
$$4x^2 - 25$$
2x. 2x 5.5

$$5) 5h^2 - 45 GCF$$

 $5(h^2 - 9)$

$$(1+x)(1-x)$$

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

7)
$$36-c^2$$
 (6+c)(6-c)

$$w^{2}(w^{2}-9)$$
 $w^{2}(w^{2}-9)$ $w^{3}(w^{2}-3)$

$$7k^{7k}$$
 9.9
9) $49k^2-81$ $(7k+9)(7k-9)$