

5.4 Special Trinomials

April 27, 2017 1:00 PM

Difference of Squares

$$u^2 - v^2 = (u - v)(u + v)$$

Ex: $x^2 - 25$
 $= x^2 + 0x - 25$
 $= (x - 5)(x + 5)$

+	x
0	-25
0	-5 x 5

Ex: $16y^2 - 81$
 $(4y - 9)(4y + 9)$

Ex: $4x^2 + 9$
 Not a difference
 Sign

Product of Squares

$x^2 + 10x + 25$
 $(x + 5)(x + 5)$
 $(x + 5)^2$

+	x
10	25
10	5 x 5

Not factorable with
 Real Number

~~$i = \sqrt{-1}$
 $(2x - 3i)(2x + 3i)$~~

Substitution

$$x^4 + 3x^2 + 2$$

Let $J = x^2$
 $J^2 = x^4$

$$J^2 + 3J + 2$$

$$(j+2)(j+1) \quad \overline{) 1 \times 2}$$

$$\boxed{\sqrt{(x^2+2)(x^2+1)}}$$

Homework

5.4 : P 247 Q: 2, 5, 7, 8, 13, 16

TEST Thursday
Next Week