

Welcome!



- All cell phones in holder.
- Complete warm-up at boards.
- Quick Check after warm-up.

Factoring Binomials with Difference of Perfect Square

Factor $x^2 - 49$

General Steps	Examples
1. Set up two empty sets of parenthesis below the polynomial.	$x^2 - 49$ $(x+7)(x-7)$
2. The first numbers must multiply together to equal the first term, ax^2 .	
3. The second numbers must multiply together to equal the last term c .	
4. Multiply the outside terms and then the inside terms. When those terms are added together, they should equal the middle term, b .	
5. Check your answer by multiplying the two binomials together.	

Practice:

1. $25x^2 - 36$

$(5x+6)(5x-6)$

2. $6x^2 - 54$

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

$$6(x+3)(x-3)$$

3. $4x^2 - 100$

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

$$4(x+5)(x-5)$$

4. $9x^2 - 121$

$(3x+11)(3x-11)$

5. $256x^2 - y^2$

$(16x+y)(16x-y)$

6. $5x^4 - 45y^2$

$$5(x^4 - 9y^2)$$

$$5(x^2+3y)(x^2-3y)$$