Secondary 2
lesson 2.4

Difference of Squares

Objective:

Rewrite in factored form using the identity: Difference of Squares

Remember: DIFFERENCE OF SQUARES?

Multiply the polynomial (distributive property)

1) $(x+2)(x-2)$ 2) $(3x-5)(3x+5)$

DIFFERENCE OF SQUARES

WITHOUT MULTIPLYING, guess what the product will be. Then check your answer by multiplying.

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

4) $(2x + 1)(2x - 1)$

DIFFERENCE OF SQUARES

GO BACKWARDS to find the difference of squares.

$$x^2 - 25$$

I. Find the square root of both terms.
EX: $x^2 \rightarrow x, \quad 25 \rightarrow 5$

II. Add roots for 1st factor, subtract roots for 2nd factor.
EX: $(x + 5)(x - 5)$

Rewrite the polynomial in factored form.

5) x^2-25

6) x^2-4

7) $4x^2-9$

8) $100x^2-1$

When can you use this short cut (Identity)?

Rewrite the polynomials in factored form.

***(Remember to always start with GCF.)

9) $3x^2 - 12$

10) $2v^4 - 8$

11) $3x^2 - 27$

12) $x^2 - 16$

13) $x^2 + 9$

14) $x^4 - 16$

Assignment:

Finish 2.4 worksheet

and

MathXL 2.4

Remember to show all your steps!