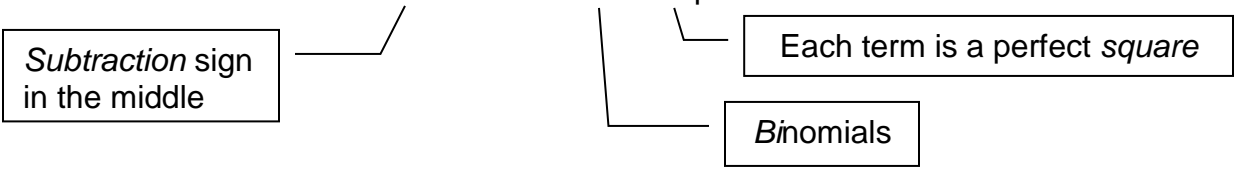


FACTORING POLYNOMIALS – Day 3

Factor the following binomials.

1. $4x^2 - 9 =$ _____	2. $x^2 - 25 =$ _____
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The two binomials above are known as a “Difference Of Two Squares”



STAAR ALGEBRA I REFERENCE MATERIALS

FACTORING

Perfect square trinomials	$a^2 + 2ab + b^2 = (a + b)^2$
Difference of squares	$a^2 - 2ab + b^2 = (a - b)^2$
	$a^2 - b^2 = (a - b)(a + b)$

Use the formula chart above to factor the following.

3. $9x^2 - 25 =$ _____	4. $16x^2 - 81 =$ _____
5. $x^2 - 100 =$ _____	6. $64x^2 - 36 =$ _____

Answer the following.

7) Write $3x^2 - 39x - 90$ in factored form.

8) What are the factors whose product yields the trinomial $8x^2 + 44x - 24$?

9) Which of the following is a factor of $2x^2 - 98$?

- A. $x + 49$
- B. $x - 49$
- C. $x + 7$
- D. $2x$

10) Express $4x^2 + 16$ as a product of factors.

11) A trim carpenter needs to apply crown molding around a rectangular window. The area of the window is shown on the diagram below. Find the perimeter of the window in terms of x in order for the carpenter to determine the amount of crown molding needed.



Area = $x^2 + 5x - 6$