<u>Unit 5, Day 6, Day Of Homework, Factoring Special Quadratics (Perfect Square Trinomials and Difference of Squares):</u>

Directions: Completely factor 8-10 problems below. Include a mix of perfect square trinomials (3 terms) and difference of squares (two terms, with subtraction in between). If there is a common factor, factor it out before factoring the problem. If you don't understand the patterns, watch the two videos (or more!). If you still don't see it, all of these can be factored using a box and diamond!

Factor each completely.

1)
$$16n^2 - 9$$

2)
$$4m^2 - 25$$

3)
$$16b^2 - 40b + 25$$

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

5)
$$9x^2 - 1$$

6)
$$n^2 - 25$$

7)
$$n^4 - 100$$

8)
$$a^4 - 9$$

9)
$$k^4 - 36$$

10)
$$n^4 - 49$$

11)
$$98n^2 - 200$$

12)
$$3 + 6b + 3b^2$$

13)
$$400 - 36v^2$$

14)
$$100x^2 + 180x + 81$$

15)
$$10n^2 + 100n + 250$$

16)
$$49n^2 - 56n + 16$$