Algebra 1 Name: _____

Unit 8: PQ2 Date: _____ Period: _____

"PRACTICE" QUIZ 2… Factoring Trinomials

<u>Part 1</u>: Factor each polynomial completely. Write "*Prime*" if an expression cannot be factored.

_____ 1) $m^2 - 13m + 36$

_____ 2) $w^2 + 8w + 16$

_____ 3) $r^2 + 4r - 3$

_____ 4) $x^2 + x - 20$

_____ 5) $p^2 - 12p - 28$

_____ 6) $v^2 + 2vw - 48w^2$

_____ 7) $y^2 + 5y - 6$

_____ 8) $x^2 - 18x + 45$

_____ 9) $b^2 - 8b - 9$

_____ 10) $7x^2 + 9x + 2$

_____ 11) $2w^2 - w - 21$

_____ 12) $3d^2 - 17d - 6$

_____ 13) $5s^2 - 7s + 2$

_____ 14) $10m^2 + 11mn - 8n^2$

Part 2: Solve each polynomial equation by factoring. No decimal answers.

_____ 15) $x^2 - 8x - 48 = 0$

_____ 16) $2y^2 - 5y = 88$

_____ 17) $r^2 + 15 = -8r$

_____ 18) $15 + 4a = 4a^2$

Part 3: Applications… Multiple-Choice. Choose the best answer.

_____ 19) A rectangle has dimensions that are the binomial factors of $11w^2 - 14w + 3$. Which of the following expressions describes the perimeter of the rectangle?

A) $8w - 24$ B) $12w - 24$ C) $22w - 8$ D) $24w - 8$

_____ 20) Which value of *c* would NOT make $n^2 - 3n - c$ factorable?

A) 10 B) 15 C) 18 D) 28