Challenge Algebra

Name _____

Solving Quadratics By Factoring 03

Date _____ Block _____

Solve each factored equation.

1) $(v + 5)(v - 2) = 0$

2) $(x + 5)(x + 1) = 0$

3) $(a - 3)(6a - 1) = 0$

4) $(n + 3)(7n - 5) = 0$

Solve each equation by factoring.

5) $x^2 + 4x + 3 = 0$

6) $k^2 - 5k - 24 = 0$

7) $x^2 + x - 2 = 0$

8) $a^2 - 64 = 0$

Solve each equation by factoring completely. (Hint: Start by setting equal to zero)

9) $x^2 - 6x = 0$

10) $b^2 + 12 = -7b$

11) $m^2 = -10 + 7m$

12) $3x^2 + 27 = -18x$

13) $6n^2 + 30n = 84$

14) $3n^2 - 15 = -12n$

15) $x^2 - 35 = -2x$

16) $r^2 = r$

17) $p^2 = -15p - 56$

18) $v^2 = 3 - 2v$

CHALLENGE: Solve each equation by factoring completely. (Hint: Start by setting equal to zero first)

19) $x^2 + 40 = 13x$

20) $12n^2 + 96 = 40n + 8n^2$

21) $n^2 + 2n - 84 = -n^2$

22) $3x^2 + 4x + 4 = 2x^2$

23) $a^2 - 4a = 21$

24) $5k^2 + 6k + 7 = 2 + 4k^2$