Algebra 2   Name_____

Section 3.1 Practice

Solve each equation by graphing. Sketch a graph to show the x-intercepts

1) $p^2 - 5p + 4 = 0$

2) $k^2 + 9k + 8 = 0$

3) $b^2 = -2b + 24$

4) $6n^2 + n - 37 = 5n^2 - 7$

5) $4x^2 - 3x - 40 = 3x^2$

6) $4n^2 - 224 = -4n$

7) $3k^2 + 30 = 21k$

8) $2n^2 + 16 = -18n$

Solve each equation by factoring.

9) $v^2 - 5v + 6 = 0$

10) $m^2 - 7m + 12 = 0$

11) $x^2 - 10x + 28 = 7$

12) $b^2 - 6b - 19 = -3$

13) $n^2 = -10 - 7n$

14) $m^2 + 2m = 24$

15) $n^2 - 1 + 6n = 6n$

16) $6x^2 - x - 56 = 5x^2$

-2-

17) $n^2 + 10n + 2 = -3 + 4n$

18) $x^2 + 18 = 2 + 10x$

Solve each equation by taking square roots.

19) $-8v^2 = -504$

20) $-10k^2 = -960$

21) $n^2 - 7 = 9$

22) $7 - 6n^2 = 1$

23) $6n^2 + 10 = 184$

24) $6x^2 + 10 = 106$