

Worksheet 3.1

Solve each equation by graphing.

1) $b^2 + 8b = -7$

2) $3m^2 - 63 = -12m$

3) $p^2 + 14p + 13 = 0$

4) $n^2 - 6n + 1 = 0$

5) $2x^2 - 3x = 119$

6) $2k^2 + 6 = 3k$

7) $9n^2 + 2 = 0$

8) $a^2 - 2a - 7 = -4$

9) $n^2 - 4n - 41 = -9$

10) $k^2 + 20k + 41 = -6$

Solve each equation by taking square roots.

11) $5k^2 - 1 = 39$

12) $8p^2 + 6 = 166$

13) $x^2 + 3 = 7$

14) $x^2 + 7 = 56$

15) $3x^2 + 10 = 139$

16) $6m^2 + 3 = 285$

17) $4p^2 + 7 = 79$

18) $4x^2 - 4 = 24$

Solve each equation by factoring.

19) $2v^2 - 26v = -84$

20) $x^2 + 24 = -10x$

21) $4k^2 = -32 + 36k$

22) $2n^2 - 96 = -4n$

23) $n^2 - 8n = -16$

24) $4x^2 + 40x = -96$