

Test 2 Study Guide

Date _____ Period _____

Solve each equation by taking square roots.

1) $r^2 - 3 = 7$

2) $p^2 - 4 = 28$

3) $n^2 + 2 = 18$

4) $-8x^2 = -136$

5) $p^2 + 5 = 30$

6) $x^2 + 2 = 6$

7) $4r^2 = 84$

8) $10p^2 - 4 = 516$

9) $7a^2 + 5 = -64$

10) $2a^2 - 3 = 9$

11) $6n^2 - 8 = 592$

12) $64x^2 - 10 = 15$

13) $36n^2 + 9 = 58$

14) $9 - 6n^2 = -381$

Solve each equation with the quadratic formula.

15) $2r^2 + 5r - 25 = 0$

16) $2a^2 + 4a - 6 = 0$

17) $a^2 - 2a - 15 = 0$

18) $2b^2 - 5b - 7 = 0$

19) $7v^2 + 4 = 6v$

20) $x^2 - 7x = 60$

21) $4v^2 + 3v = -1$

22) $3 = 8 - 5a^2 + 3a$

23) $-13x^2 + x + 7 = -6x^2$

24) $-10b^2 + 2 = -5b^2 + 6$

Solve each equation by completing the square.

25) $n^2 - 8n - 48 = 0$

26) $n^2 + 6n - 10 = 0$

27) $a^2 + 8a - 9 = 0$

28) $n^2 - 4n - 21 = 0$

29) $n^2 + 16n + 50 = 0$

30) $7x^2 - 14x - 36 = 2$

31) $8p^2 + 16p + 39 = -9$

32) $8v^2 + 16v + 75 = -7$

33) $7m^2 + 14m + 94 = 3$

34) $10n^2 + 20n - 32 = -2$