

Unit 1 Test 2 Recovery Work Required(Answers only.)

Date _____

Solve each equation by taking square roots.

1) $-2x^2 = 70$

2) $-7v^2 = -21$

3) $-5x^2 = 45$

4) $7v^2 = -14$

5) $x^2 - 3 = -19$

6) $k^2 - 7 = 70$

7) $r^2 + 2 = 100$

8) $n^2 + 6 = 24$

9) $2b^2 + 6 = 4$

10) $36a^2 + 1 = 2$

11) $4p^2 - 3 = 269$

12) $100x^2 - 2 = 98$

13) $2x^2 - 10 = -25$

14) $36k^2 - 6 = -2$

15) $5n^2 - 2 = 433$

16) $8p^2 + 4 = -87$

Find the value of the discriminant of each quadratic equation.

17) $4x^2 + 9x - 5 = 0$

18) $-9m^2 + 3m + 3 = 0$

19) $-4a^2 - 9 = 0$

20) $-3b^2 + 4 = 0$

21) $3n^2 + 2n - 6 = 0$

22) $4p^2 + p + 8 = 0$

Find the discriminant of each quadratic equation then state the number and type of solutions.

23) $-4p^2 + 7p + 2 = 0$

24) $2n^2 - 7n - 4 = 0$

25) $2k^2 - 4k + 2 = 0$

26) $9p^2 + 6p - 5 = -10$

27) $-7b^2 + b + 3 = 9$

28) $-6x^2 - 3x - 12 = -10$

Solve each equation with the quadratic formula.

29) $4k^2 + 8k + 4 = 0$

30) $2p^2 - 5p - 25 = 0$

31) $7v^2 - 2v - 1 = 0$

32) $7n^2 - 7n - 5 = 0$

33) $n^2 + 2n = 6$

34) $4x^2 - 7x - 5 = -4$

35) $4x^2 + 6x + 13 = 8$

36) $6n^2 - 4n + 10 = 5$

37) $n^2 - 2 = 6n$

38) $6x^2 = -6 + 5x$

39) $8v^2 - 3v = 14$

40) $4v^2 + 6 = v$