

Name _____ Date _____ Class _____

LESSON
22-1**Solving Equations by Taking Square Roots**

1. Get x^2 by itself.
2. Simplify square root if possible. (Do not forget that square root produces a +/- solution)

$$4x^2 - 5 = 2 \quad 2x^2 - 8 = 0 \quad 3x^2 + 6 = 33 \quad 5x^2 - 9 = 2$$

$$(x + 5)^2 = 36 \quad 3(x - 5)^2 = 18 \quad 4(x + 10)^2 = 24 \quad (x - 9)^2 = 64$$

Classwork/Homework:**Solve. If the equation has no solution, give that as your answer.**

1. $x^2 - 25 = 0$

2. $x^2 + 25 = 0$

3. $6x^2 - 6 = 0$

4. $-3x^2 + 27 = 0$

5. $-2x^2 + 1 = 0$

6. $4x^2 - 100 = -100$

7. $x^2 - 121 = 0$

8. $x^2 - 49 = 0$

9. $x^2 - 16 = 20$

10. $(x + 5)^2 - 6 = 43$

11. $(x - 1)^2 - 19 = 81$

12. $(x - 14)^2 + 13 = 14$

13. $2(x - 3)^2 + 1 = 73$

14. $(x - 1)^2 + 14 = 15$

15. $-2(x + 1)^2 - 5 = -55$

16. $2(x + 1)^2 - 1 = 9$

17. $2(x - 3)^2 + 7 = 19$

18. $5(x - 7)^2 + 10 = 25$
