



Algebra II
Solving Quadratic Equations by Finding Square Roots

Today I will...	I'll know I've got it when...	Essential Question...

Example 1: Solve $2x^2 + 1 = 17$ by taking the square root.

Step 1:

Step 2:

Step 3:

Example You Try 1: $3 - 5x^2 = -9$ by taking the square root.

Example 2: $\frac{1}{3}(x + 5)^2 = 7$ by taking the square root.

Example You Try 2: $3(x - 2)^2 = 21$ by taking the square root.

When would solving a quadratic equation by finding the square roots be appropriate?

More Practice:

Example 3: $7x^2 - 6 = 57$

Example 4: $(2k - 1)^2 = 9$

Example 5: $3m^2 + 7 = 301$

Example 6: $(6x + 2)^2 + 4 = 28$

Example 7: $4x^2 - 6 = 74$

Example 8: $10(x - 7)^2 = 440$