SOLVING *Quadratics* BY SQUARE ROOTS

Quadratic Equations of the form _____

can be solved using the **Square Root Property:**

If $x^2 = n$, then _____

(1)	**ISOLATE X^2**
(2)	Take the **SQUARE ROOT** of both sides.
(3)	**SIMPLIFY** the radical. Place "±" to indicate both answers.

Directions: Solve each equation using the square roots method.

Simplifying Negative Square Roots

Step 1: Rewrite $\sqrt{-a}$ as $\sqrt{-1 \cdot a}$

Step 2: Break a down if it is not a perfect square.

Step 3: Simplify the radical, recalling that $\sqrt{-1} = i$.

2. $x^2 + 81 = 0$

3. $81x^2 + 5 = 21$

4. $2x^2 + 9 = 1$

5. $2x^2 - 9 = 55$

6. $4x^2 + 15 = -9$

7. $4 - 3x^2 = -77$

8. $x^2 + 13 = 1$

9. $-\frac{1}{2}x^2 + 1 = -39$