Lesson #14

The Quadratic Formula

The store function is useful for calculations that involve formulas. The quadratic formula is commonly used to solve second-degree equations. A second-degree equation must be set equal to zero before the formula can be used.

For $ax^2 + bx + c = 0$, where a, b, and c are constants

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Set 1 – Solve the following equations using the store function and the quadratic formula.

I D#4	2 24 5
LP#1	$y^2 = 24 - 5y$
$x^2 + 8x + 7 = 0$	
LP#2	$y^2 = 49$
$x^2 - x - 6 = 0$	
$\lambda - \lambda - 0 = 0$	

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R#1	$y^2 = 5y$
$x^2 - 8x + 16 = 0$	
$\lambda = 6\lambda + 10 = 0$	
R#2	$y^2 = 16$
	y -10
$3x^2 + 5x - 2 = 0$	
R#3	$6y^2 = 4 - 5y$
	0y = 4 - 3y
$6x^2 - x - 2 = 0$	