ALGEBRA II
Chapter 4 section 8
Use the Quadratic Formula and the Discriminant
pg. 292

FOCUS:
How do you use the quadratic formula and the discriminant?

VOCAB:
Quadratic formula:

Discriminant:

WARM – UP:

1. Write $15x^2 + 6x = 14x^2 - 12$ in standard form.

2. Evaluate $b^2 - 4ac$ when $a = 3$, $b = -6$, and $c = 5$

3. A student is solving an equation by completing the square. Write the step in the solution that appears just before "$(x - 3) = \pm 5$"

NOTES:

Solve

$x^2 - 5x = 7$ $16x^2 - 23x = 17x - 25$

$x^2 - 6x + 10 = 0$

Find the discriminant of the quadratic equation and give the number and type of solutions of the equation.

$x^2 + 10x + 23 = 0$ $x^2 + 10x + 25 = 0$ $x^2 + 10x + 27 = 0$

A basketball player passes the ball to a teammate. The ball leaves the player's hand 5 feet above the ground and has an initial vertical velocity of 55 feet per second. The teammate catches the ball when it returns to a height of 5 feet. How long is the ball in the air?

$h = -16t^2 + v_o t + h_o$

Let's see if you comprehended what we worked on in class…

Try _____ for homework