

I. Quadratic Formula (p.597):

$$ax^2 + bx + c = 0 \Rightarrow x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

II. Examples (p.607): Exercises #6,12,18

III. Discriminant (p.601): $b^2 - 4ac$

positive \Rightarrow two real solutions

zero \Rightarrow one real solution

negative \Rightarrow two complex solutions

IV. Examples (p.607): Exercises #20,24

HW: pp.607-608 / Exercises #3-25(odd),31,35,41

Read pp.611-624 (section 8.3)

VI. Modeling a Quadratic Equation (p.603):

If $x=m$ and $x=n$ are solutions to the quadratic equation, $ax^2 + bx + c = 0$,
then...

$(x - m)$ and $(x - n)$ are factors of $ax^2 + bx + c$.

$$i.e., \quad a(x - m)(x - n) = 0$$

VII. Examples (p.608): Exercises #54,60

HW: p.608 / Exercises #51-59(odd)

Re-read pp.611-624 (section 8.3)