

I. $A \times B = 0 \iff A = 0 \text{ or } B = 0$

e.g.,

$$(x - 2)(x + 5) = 0 \iff (x - 2) = 0 \text{ or } (x + 5) = 0$$
$$\therefore x = 2 \text{ or } x = -5$$

II. Quadratic equation (p.368):

$$ax^2 + bx + c = 0 \quad (\textit{general form})$$

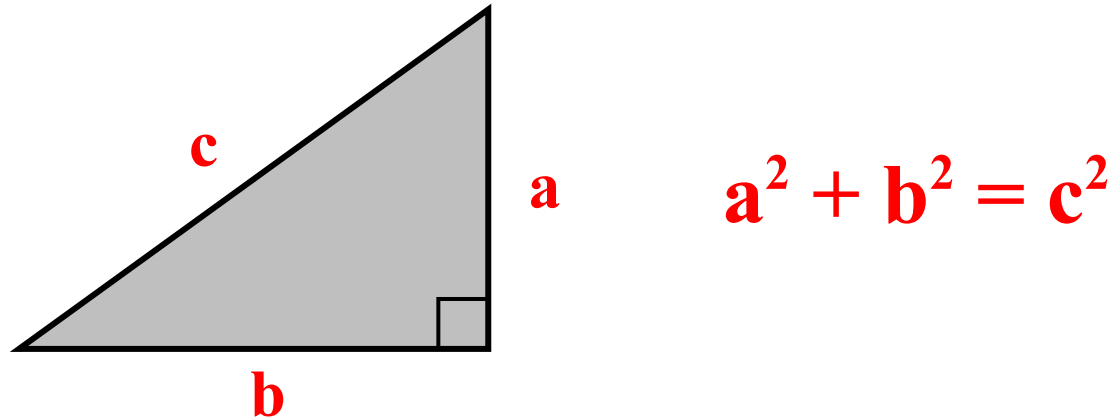
III. Examples (pp.376-377): Exercises #4,14,32,36

IV. Degree of a polynomial, $n \sim \#$ of zeros

i.e., $P(x) = 0$ has n possible solutions

V. Example (p.377): Exercise #40

VI. Pythagorean Theorem (p.375):



VII. Example:

A baseball diamond is **90 ft** between each base. How far must the catcher (at home plate) throw the ball in order to reach the 2nd baseman?

HW: pp.376-379 / Exercises #1-45 (every other odd),
61,71,83