

## I. Quadratic Equation in One Variable (p.582):

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

## II. Methods of solution:

1. Factoring (5.7)
2. Square Root Property (8.1)
3. Completing the Square (8.1)
4. Quadratic Formula (8.2)

## III. Square Root Property (p.583):

$$x^2 = k \Rightarrow x = \pm \sqrt{k}$$

note: SRP is most useful when  $b = 0$

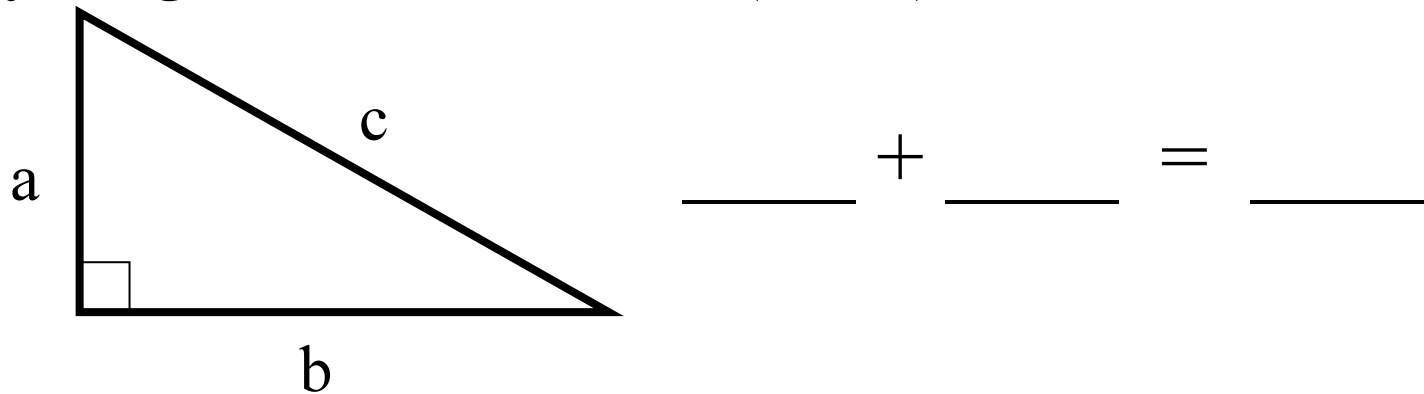
## IV. Examples (pp.592-593): Exercises #6,10,16,22

## V. Completing the Square (p.587):

subtract constant term (“c”), obtain  $a = 1$ ,  
add  $(0.5b)^2$ , factor, and then use the SRP

VI. Examples (p.593): Exercises#40,46,56

VII. Pythagorean Theorem (p.591):



VIII. Example (p.595): Exercise #86

HW: pp.592-593 / Exercises #1,5,7,9,15,19,23,31,  
35,41,47,51,57,85,87

Read pp.596-606 (section 8.2)