## MTH 28 LECTURE NOTES (Ojakian)

# **Topic 7: Factoring Trinomials**

#### **OUTLINE**

References: 6.1, 6.2

#### 1. Factoring Trinomials

**PROBLEM 1.** Factor the following:

- (a)  $x^2 + 5x + 6$
- (b)  $x^2 5x + 6$
- (c)  $x^2 + 7x + 6$

### 2. Factoring Harder Trinomials

When  $A \neq 1$ : Guess-and-Check OR AC Method

#### AC Method:

- Find the product AC.
- Find two numbers whose product is AC and sum is B
- Break up middle term using the two numbers
- Use Grouping Method
- (a) Problems (Section 6.2): 95/96, 99/101
- (b)

PROBLEM 2. Factor the following:

i. 
$$x^2 - 4x - 21$$

ii. 
$$2x^2 + 5x - 3$$

*iii.* 
$$6y^2 + 23y + 20$$