

**LAGUARDIA COMMUNITY COLLEGE**  
**Department of Mathematics, Engineering, and Computer Sciences**  
**MAT 096 ELEMENTARY ALGEBRA / PILOT**

**Lab # 7**

1. Factor out the greatest common factor.

$$30 r^2 s + 15 r s^2$$

2. Factor by grouping

$$13x - 11 + 39 ax - 33 a$$

3. Factor by grouping

$$y^2 + 4y + 8y + 32$$

4. Factor

$$x^2 - 3x - 18$$

5. Factor

$$2x^2 + 9x + 9$$

6. Factor the following expression

$$4x^2 - 9y^2$$

7. Factor the following:

$$81x^2 - 72x + 16$$

8. Factor completely :

a.  $12x^2 + 2x - 2$

b.  $2a^2 b + 18 b^3$