

**LAGUARDIA COMMUNITY COLLEGE**  
**Department of Mathematics, Engineering, and Computer Sciences**  
**MAT 096 ELEMENTARY ALGEBRA / PILOT**  
**Lab 1**

1. Simplify the expression:  $(-6)^2$  and  $-6^2$

2. Simplify  $3 \times 2 - (2 - 2^3)^2$

3. Simplify  $[-8]^2 - 5^2] \div (-4 + 1)$

4. Simplify  $| -14 | - | 7 - 8 |$

5. Simplify  $\frac{4-3\times2^2}{5+3(3^2-7)}$

6. Simplify  $\frac{12+3^2(7-9)}{3-4(2^2-7)}$

7. Simplify  $\frac{-3}{5} \cdot \frac{20}{27}$  and  $\frac{-4}{15} \div \frac{-16}{25}$

8. Simplify  $-\frac{14}{15} \cdot \frac{10}{21}$  and  $\frac{9}{10} \div \frac{15}{-2}$

9. Evaluate  $c - 7a$  when  $a = 3$  and  $c = -7$ .

10. Evaluate  $-c + 5a$  when  $a = -3$  and  $c = 5$

11. Evaluate  $x^2 - 6y + 3$  when  $x = 3$ .

12. Evaluate  $y^2 - 9y + 6$  when  $y = -2$ .