

Geometry

Algebra Review Week 6

Name \_\_\_\_\_ Per \_\_\_\_\_

Semester 1

**SHOW ALL WORK!**

Factor completely:

1.  $3b^2 - 2b - 5$

2.  $2x^2 + 3x - 9$

3.  $3n^2 - 8n + 4$

Simplify:

4.  $\frac{x^2-9}{12} \cdot \frac{36}{x+3}$

5.  $\frac{x^2+10x+16}{x^2+6x+8} \div \frac{1}{x+4}$

Find the solution to the system of equations.

6.  $x = 7 - 3y$   
 $x + 2y = 10$

7.  $5x + y = 9$   
 $10x - 7y = -18$

Solve for the given variable.

8.  $11 - (c + 2) = 2c - 3(2c - 1)$

Multiply

9.  $(2x^2 - 3y)^2$

Graph the solutions to:

10.  $3x - 2y > 6$

11.  $2x - y \leq 5$

