Adv Alg 2 Summer Worksheet #3 Name _____

1. Write the equation of the line passing through the points (12,-4) and (3,15) in <u>slope-intercept form.</u>	2. Write the equations of the line passing through the points (3,-17) and (-6, 4) in <u>point-slope form</u>.	3. Solve and graph the solution on a number line. Then state the solution. $2x - 5 \geq 1 \ \ or - 3x + 1 \leq -20$
4. Solve and graph the solution on a number line. Then state the solution. $4a + 5 > 11a + 12 \ \ and$ $13 - 14a \leq 13 - 3a$	5. Solve and graph the solutions on a number line. $-\lvert x + 3\rvert \geq 2$	6. Solve using the quadratic formula. $4 + 9x^2 - 12x = 0$
7. Solve using the zero product property. $8x^2 + 2x = 3$	8. Solve and graph the solutions on a number line. $\lvert 2x - 1\rvert = 3$	9. Factor completely : $6n^2 - 7n - 3$
10. Factor completely : $5b^2 + 5b - 30$	11. Solve the system of equations. Write the solution as an ordered pair. $x = 2y + 8$ $3x - 6y = 24$	12. Solve the system of inequalities by graphing. $x + 2y \leq 4$ $3x - y \geq -2$