Algebra 2 – Systems of Equations Worksheet

Name: ______ Date: _____

Solve the following systems of equations. Use whichever method you would like, though I will put them in groups based on which way I recommend you solve them.

Recommended Method: Graphing Calculator

1.
$$y = -\frac{2}{5}x + 1$$
; $y = \frac{3}{5}x - 4$

2.
$$y = -\frac{2}{3}x + 4$$
; $y = 3x - 7$

3.
$$y = 3x - 4$$
; $y = -\frac{2}{3}x + 1$

Recommended Method: Substitution

$$4.4x - y = 8$$
; $y = 4x + 3$

$$5.5x + y = 10$$
; $y = 5x + 10$

6.
$$6x - y = 18$$
; $y = \frac{1}{6}x + 3$

Recommended Method: Elimination

7. x + 6y = 1

$$-2x - 11y = -4$$

9.
$$12x + 3y = 8$$

$$-6x - \frac{3}{2}y = 4$$

$$8.\ 2x - 3y = -3$$

$$-6x + 10y = 8$$

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

$$-x - 2y = 4$$

Systems of Inequalities:

11.
$$y > -\frac{3}{4}x - 1$$

$$y > 3x + 5$$

12.
$$5x - 2y > -10$$

$$y \le -\frac{1}{3}x + 2$$



