1. Without graphing tell if each system of equations has ONE, NONE, or MANY solutions.

a) $y = -2x - 9$

$10x - 5x = 45$

b) $y = -3x$

$-3x + y = 7$

2. Solve each system of equations.

a)

$2x + 2y = 32$

$-5x + 6y = -25$

b)

$y = -3x + 1$

$4x - y = 13$

3. Graph this system of inequalities. Shade the solution region a different color.

$y > -3x - 5$

$12x - 24y \leq -48$