Name: _____ Date: _____

MA 162

Week 3 Recitation Worksheet (Tuesday)

You must show all work to receive full credit.

1. Find the slope and y-intercept of the line with equation

$$11x - 5y + 1 = -4x + 7y + 2.$$

2. Find the slope-intercept form of the line that passes through the points $(-2, 9)$ and $(6, -15)$.

3. Are the points $(-1, -2)$ and $(9, -6)$ on the same side of the line $3x + 5y = -7$? How do you know?

4. Solve the given system of equations using the substitution method.

$$\begin{cases} 4x - 7y = -71 \\ -3x + y = 32 \end{cases}$$

5. Solve the given system of equations using the elimination method.

$$\begin{cases} x + 2y = -26 \\ 6x - 5y = -3 \end{cases}$$

6. Solve the given system of equations using either the substitution method or the elimination method.

$$\begin{cases} 2x + 5y = -14 \\ 6x - 7y = \quad 46 \end{cases}$$

7. Solve the given system of equations using either the substitution method or the elimination method.

$$\begin{cases} x - \frac{2}{3}y = -16 \\ \frac{5}{4}x + \frac{1}{6}y = -5 \end{cases}$$

8. Solve the given system of equations using the elimination method. Are there any issues that arise?

$$\begin{cases} -4x + 3y = 7 \\ 8x - 6y = -9 \end{cases}$$