**Unit 1 Practice worksheet Name:**

 **Show all your work** **Period:**

**1-Solve** x − 3(x − 1) + 8(x − 3) = 6(x + 1) + 1 − 4x

**2-Use substitution to solve the system of equations.**

$$\left\{\begin{array}{c}y=6x-11\\-2x-3y=-7\end{array}\right.$$

3- Use a graphing calculator to solve the system of equations. (Show your solving for “y = “ also.) Round answer to nearest tenth. $\left\{\begin{array}{c}-5x+7y=-15\\y=3x+6\end{array}\right.$

**Linear functions.**

1. Write the equation for a line that passes through points ( 5,2) and ( -5,14). Your final answer should be in **slope-intercept** form.
2. Write the equation for a line that is parallel to $5x+9y=-18$ and passes through the point (9, 6)
3. Determine the slope of the line that is **perpendicular** to the line 8x – 3y = 15.
4. $Graph the line y=-\frac{5}{3}x+7$
5. **Evaluate** $\frac{\frac{3}{5} -\frac{1}{3} }{\frac{1}{4}}$

**Use properties of exponents to simplify each expression.**

1. $(7a^{-2})^{3}$ 10) $\frac{6x^{4}y^{2}}{4x^{-1}y^{7}z^{-3}}$