HATT GE Practice   Name:

1. Make an augmented matrix from the system of equations:

$$4x - z = 7$$
$$8x + 5y - z = 0$$
$$-x - y + 5z = 6$$

3. Find x, y, z by substitution

4. Find x, y, z by doing the following:
$$R_2 = 13r_3 + r_2$$
$$R_1 = 5r_3 + r_1$$
$$R_1 = -1r_2 + r_1$$

2. Consider the augmented matrix that was used to solve a system of equations:

$$\left[\begin{array}{ccc|c} 4 & 0 & -1 & 7 \\ 8 & 5 & -1 & 0 \\ -1 & -1 & 5 & 6 \end{array}\right]$$

swap $r_1 \leftrightarrow r_3$.

$R_1 = -1r_1$.

5. Consider the dependent system:

$$x - 2y - z = 8$$
$$2x - 3y + z = 23$$
$$4x - 5y + 5z = 53$$

$R_2 = --8r_1 + r_2$
$R_3 = -4r_1 + r_3$

$R_2 = -\frac{1}{3}r_2$
$R_3 = 4r_2 + r_3$

6. Consider the inconsistent system:

$R_3 = -\frac{1}{33}r_3$

$$2x + y - z = 2$$
$$x + 2y - z = -9$$
$$x - 4y + z = 1$$