Name: _____ Date:_____

PC: Practice Using Matrices to Solve Linear Systems Ms. Loughran

Solve each of the following using matrices.

1. $\begin{aligned} x+2y-z&=1\\ 2x-y+3z&=4\\ 5x\quad\ +5z&=9 \end{aligned}$

2. $\begin{aligned} 3x-2y+z-1&=0\\ x-y-z-2&=0\\ 6x-4y+2z-3&=0 \end{aligned}$

3. $\begin{aligned} x+y+z&=4\\ x-2y-z&=1\\ 2x-y-2z&=-1 \end{aligned}$

4. $\begin{aligned} x+y+z&=6\\ 2x-y+3z&=9\\ -x+2y+2z&=9 \end{aligned}$

5. $\begin{aligned} 2x-y-3z&=-1\\ 2x-y+z&=-9\\ x+2y-4z&=17 \end{aligned}$

6. $\begin{aligned} 2x-3y+z&=5\\ x+3y+8z&=22\\ 3x-y+2z&=12 \end{aligned}$

7. $\begin{aligned} 3x-2y+7z&=13\\ x+8y-6z&=-47\\ 7x-9y-9z&=-3 \end{aligned}$

8. $\begin{aligned} 2x+y+z&=-2\\ 2x-y+3z&=6\\ 3x-5y+4z&=7 \end{aligned}$

9. $\begin{aligned} 2x+3y+z&=17\\ x-3y+2z&=-8\\ 5x-2y+3z&=5 \end{aligned}$

10. $\begin{aligned} -x+2y+3z&=11\\ 2x-3y\quad\ &=-6\\ 3x-3y+3z&=3 \end{aligned}$