Name: _____ Date:_____

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