Homework 22 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Verify that the **values given** are solutions to the given system of equations
	1. $\left\{\begin{array}{c}2x-y=5\\5x+2y=8\end{array}\right. ;x=2, y=-1$
	2. $\left\{\begin{array}{c}x-y=3\\-3x+y=1\end{array}\right. ;x=-2, y=-5$
	3. $\left\{\begin{array}{c}3x+3y+2z=4\\x-3y+z=10\\5x-2y-3z=8\end{array}\right. ; x=2, y=-2, z=2$
2. Solve each system of equations using substitution. If the system has no solutions, say so.
	1. $\left\{\begin{array}{c}x+y=8\\x-y=4\end{array}\right.$
	2. $\left\{\begin{array}{c}3x-y=7\\9x-3y=21\end{array}\right.$
	3. $\left\{\begin{array}{c}2x+y=1\\4x+2y=3\end{array}\right.$
3. Solve each system of equations using matrices. If the system has no solutions, say so.
	1. $\left\{\begin{array}{c}2x+3y=6\\2x-2y=1\end{array}\right.$
	2. $\left\{\begin{array}{c}x-y=6\\2x-3z=16\\2y+z=4\end{array}\right.$
	3. $\left\{\begin{array}{c}x-2y+3z=7\\2x+y+z=4\\-3x+2y-2z=-10\end{array}\right.$