

1. [8pts] Use Cramer's rule to solve for  $y$  the system  $\begin{cases} x - y + z = 3 \\ -x + y + z = 4 \\ x + y - z = 2 \end{cases}$

2. [8pts] Express, if possible, the vector  $w = (3, 8, 6)$  as a linear combination of  $u = (3, -2, 0)$  and  $v = (1, -4, -2)$ .