線形代数「クラーメルの公式」解答

$\boxed{1}$ $x = 1,\ y = -1,\ z = 2$

$\boxed{2}$

(1) $A = \begin{pmatrix} 2 & 3 & -1 \\ -1 & 2 & 2 \\ 1 & 1 & -1 \end{pmatrix}, \vec{b} = \begin{pmatrix} -3 \\ 1 \\ -2 \end{pmatrix}$

(2) $\det(A) = -2$

(3) $\det(\vec{b}\ \vec{a}_2\ \vec{a}_3) = -2$

(4) $\det(\vec{a}_1\ \vec{b}\ \vec{a}_3) = 2$

(5) $\det(\vec{a}_1\ \vec{a}_2\ \vec{b}) = -4$

(6) $\alpha = \dfrac{\det(\vec{b}\ \vec{a}_2\ \vec{a}_3)}{\det(A)} = 1, \beta = \dfrac{\det(\vec{a}_1\ \vec{b}\ \vec{a}_3)}{\det(A)} = -1, \gamma = \dfrac{\det(\vec{a}_1\ \vec{a}_2\ \vec{b})}{\det(A)} = 2$