

WHERE

$$A = \begin{bmatrix} 1 & 1 & -1 & \boxed{} \\ 1 & -1 & \boxed{} & -1 \\ \boxed{} & 3 & 0 & \boxed{} \\ 18 & \boxed{} & -6 & -10 \end{bmatrix}.$$

THUS, SINCE WE REQUIRE THAT $\alpha\delta$ AND $\beta\gamma$ BE DISTINCT, A NONTRIVIAL SOLUTION OF SYSTEM (†) IS REQUIRED. THIS CAN BE

OBTAINED BY SPECIFYING THAT $\gamma = \boxed{}$, SINCE THE NULLITY OF A IS $\boxed{}$.

THUS, WE GET

$$\alpha = \boxed{} \quad \beta = \boxed{} \quad \gamma = \boxed{}$$

AND

$$\delta = \boxed{}.$$

P-5

11 BLANKS