

$$a_{11}^2+a_{21}a_{22}+a_{31}a_{33} = 0, \, a_{11}a_{12}+a_{22}a_{32}+a_{33}a_{33} = 0, \, a_{11}a_{13}+a_{22}a_{23}+a_{33}^2 = 0, \, a_{21}a_{22}a_{11}^2+a_{31}a_{33}a_{11}^2-a_{11}a_{31}a_{21}a_{21}a_{22}a_{31}a_{33}-a_{21}a_{22}a_{33}a_{31}a_{32} = 0, \, a_{21}a_{22}a_{12}a_{22}a_{32}a_{33}a_{22}a_{33}$$

$$a_{32}a_{33}a_{32}a_{33} = 0, \, a_{22}^2a_{33} - a_{22}^3a_{32}a_{32} + a_{11}a_{32}a_{32}a_{33} - a_{12}a_{32}a_{22}a_{33}a_{22}a_{32}a_{32} + a_{33}a_{21}a_{22}a_{33}a_{12} + a_{11}a_{32}a_{33} - a_{13}a_{22}a_{22}a_{33} - a_{13}a_{33}a_{33}a_{32} = 0, \, a_{11}a_{21}a_{33}a_{21} + a_{12}a_{22}a_{32}a_{33} - a_{12}a_{22}a_{33}a_{33}a_{23}a_{32}a_{32}a_{33} = 0, \, (a_{12}a_{22}a_{33}a_{31} + a_{11}a_{21}a_{33} + a_{13}a_{21}a_{33}) \det A = 0, \, (a_{11}a_{22}a_{33}a_{31} + a_{21}a_{22}a_{33} + a_{13}a_{22}a_{33}) \det A = 0, \, (a_{12}a_{22}a_{33} + a_{12}a_{22}a_{33}a_{31}a_{13}a_{21}a_{33}) \det A = 0, \, (a_{12}a_{23}a_{33} + a_{13}a_{22}a_{23}a_{33} + a_{13}a_22a_{33}) \det A = 0, \, (a_{12}a_23a_{33} + a_{13}a_{23}a_{33} + a_{13}a_32a_{33}) \det A = 0, \, (a_{12}b_{23}a_{33} + a_{13}a_{23}a_{32}a_{33} + a_{13}a_22a_{32}a_{33}) \det A = 0, \, (a_{12}a_23a_{33} + a_{13}a_{23}a_{33} + a_{13}a_{23}a_{33}) \det A = 0, \, (a_{12}a^2a_{33}a_{33} + a_{13}a_{22}a_33 + a_{13}a_{22}a_{33}) \det A = 0,$$