

$$\left| \begin{bmatrix} 3 & 1 & 1 \\ 5 & 1+\lambda & 3 \\ 6+\lambda^2 & 3 & 6-\lambda^2 \end{bmatrix} \right| : \begin{bmatrix} 3 & 1 \\ 5 & 1+\lambda \\ 6+\lambda^2 & 3 \end{bmatrix} = 3(1+\lambda)(6-\lambda^2) + 3(6\lambda^2) + 15 - \\ - (6+\lambda^2)(1+\lambda) - 27 - 5(6\lambda^2) \\ = -4(\lambda-1)(\lambda^2-3)$$

$$\left| \begin{bmatrix} 3 & 6 & 1 \\ 5 & 5 & 1+\lambda \\ 6+\lambda^2 & 4 & 3 \end{bmatrix} \right| : \begin{bmatrix} 3 & 6 \\ 5 & 5 \\ 6+\lambda^2 & 4 \end{bmatrix} = 3 \cdot 5 + 6(1+\lambda)(6+\lambda^2) + 20 - \\ - (6+\lambda^2)5 - 12(1+\lambda) - 30 \cdot 3 = \\ = (\lambda-1)(6\lambda^2+7\lambda+31) = \\ = (\lambda-1)(6\lambda^2+3)$$

Sprawy gdy $\lambda \neq 1$

jedno wzr. gdy $\lambda = 1$