$$\left(\begin{array}{ccc|c} 1 & 1 & 1 & 6 \\ 1 & \lambda & & 9 \\ & 1 & -1 & -1 \end{array}\right) \sim \left(\begin{array}{ccc|c} 1 & 1 & 1 & 6 \\ 1 & \lambda & & 9 \\ & 1 & -1 & -1 \end{array}\right)$$

$$\left(\begin{array}{ccc|c} x & y & z & \\ 1 & 1 & 1 & 6 \\ & 1 & \lambda & 9 \\ -1 & & 1 & -1 \end{array}\right) \sim \left(\begin{array}{ccc|c} 1 & 1 & 1 & 6 \\ & 1 & \lambda & 9 \\ & & 2-\lambda & -4 \end{array}\right)$$

$\lambda = 2$: $0z = -4$ nemá řešení

$$\left(\begin{array}{ccc|c} 2-\lambda & 2-\lambda & 0 & 6(2-\lambda)+4 \\ & 2-\lambda & 0 & 9(2-\lambda)-\lambda(-4) \\ & & 2-\lambda & -4 \end{array}\right) \sim \left(\begin{array}{ccc|c} x & y & z & \\ 2-\lambda & & & 16-6\lambda \\ & 2-\lambda & & -5\lambda+18 \\ & & 2-\lambda & -4 \end{array}\right)$$

$$P = \left\{\left[\frac{-5\lambda+18}{2-\lambda}; \frac{-4}{2-\lambda}; \frac{34-\lambda}{2-\lambda}\right]\right\}$$

$$\left(\begin{array}{ccc|c} 1 & 1 & 1 & 3 \\ 1 & \lambda & \lambda & 5 \\ & 1 & -1 & 0 \end{array}\right) \sim \left(\begin{array}{ccc|c} 1 & 1 & 1 & 3 \\ & \lambda-1 & \lambda-1 & 2 \\ & 1 & -1 & 0 \end{array}\right) \sim$$

$$\left(\begin{array}{ccc|c} 1 & 1 & 1 & 3 \\ & 1 & -1 & 0 \\ & & \lambda-1 & 1 \end{array}\right) \sim \left(\begin{array}{ccc|c} 1 & 1 & 1 & 3 \\ & \lambda-1 & & 1 \\ & & \lambda-1 & 1 \end{array}\right) \sim$$

$$\left(\begin{array}{ccc|c} \lambda-1 & & & 3\lambda-3 \\ & \lambda-1 & & -1 \\ & & \lambda-1 & 1 \end{array}\right)$$

$\lambda = 1 \Rightarrow$ nemá řešení

$\lambda \neq 1 \Rightarrow P = \left\{\left[\frac{3\lambda-3}{\lambda-1}; \frac{-1}{\lambda-1}; \frac{1}{\lambda-1}\right]\right\}$