

### MAPLE Practice Quiz 8

Let  $M$  be the matrix defined below. Find orthonormal bases for the column space of  $M$ , the row space of  $M$  and the null space of  $M$ . Repeat the exercise for  $M^t$ .

$$\begin{bmatrix} \frac{1}{2} & \frac{1}{3} & \frac{1}{4} \\ \frac{1}{3} & \frac{1}{4} & \frac{1}{5} \\ \frac{1}{4} & \frac{1}{5} & \frac{1}{6} \\ \frac{1}{5} & \frac{1}{6} & \frac{1}{7} \\ \frac{1}{6} & \frac{1}{7} & \frac{1}{8} \end{bmatrix}$$