$$MR = \begin{array}{c} \\ 1 \\ 2 \\ 3 \\ 4 \end{array} \begin{array}{cccc} a & b & c & d \\ \left[\begin{array}{cccc} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \\ 1 & 1 & 0 & 1 \\ 0 & 0 & 0 & 0 \end{array}\right] \end{array} \qquad MS = \begin{array}{c} \\ a \\ b \\ c \\ d \end{array} \begin{array}{ccc} x & y & z \\ \left[\begin{array}{ccc} 0 & 0 & 0 \\ 1 & 0 & 1 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{array}\right] \end{array}$$

There is an arrow (path) from 2 to d which is followed by a

n arrow from d to z

2Rd and dSz ⟹ 2(R oS) z

and 3(R∘S)x and 3(R∘S)z

so R oS = {(3,x),(3,z),(2,z)}

R   S