

## TRANSPOSING MATRICES

Exercise 1: Find the transpose of the following matrices

a)  $\begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix}$

b)  $\begin{pmatrix} -2 & 3 & 6 \\ 4 & 7 & 13 \end{pmatrix}$

c)  $\begin{pmatrix} 4 & 1 \\ 5 & 2 \end{pmatrix}$

d)  $\begin{pmatrix} 3 & -4 & 7 & 9.5 \\ 1 & 2 & 5 & 10 \\ 6 & 6.2 & -3 & 11 \\ -1 & 1.3 & 8 & 4 \end{pmatrix}$

e)  $\begin{pmatrix} 7 & -7 & 8 \\ -8 & 4 & 3 \\ -3 & 2 & 1 \end{pmatrix}$

f)  $\begin{pmatrix} 11 & 12 \\ 13 & 19 \end{pmatrix}$

g)  $\begin{pmatrix} 3 \\ 5 \\ 9 \end{pmatrix}$

h)  $\begin{pmatrix} 1 & 2 & 1 \end{pmatrix}$

i)  $\begin{pmatrix} 5 & -6 & 7 \\ 0 & -2 & 4 \\ 0 & 0 & 1 \end{pmatrix}$

j)  $\begin{pmatrix} 7 & 9 & 10 & 6 \\ -6 & 1 & 3 & 2 \end{pmatrix}$