3) $e_1 = e_A = [0, 0, 1]^T$.

$e_2 = [0, 1, 0]^T$

$e_3 = e_1 \times e_2 = [1, 0, 0]^T$

$$H_A = \begin{bmatrix} e_1^T \\ e_2^T \\ e_3^T \end{bmatrix} = \begin{bmatrix} 0 & 0 & 1 \\ 0 & 1 & 0 \\ 1 & 0 & 0 \end{bmatrix}$$

$$H_B = RH_A = \begin{bmatrix} 0 & 0 & 1 \\ 0 & 1 & 0 \\ 1 & 0 & 0 \end{bmatrix}$$

Thus, Epipolar rectification's possible

d). Given $t = [0, 0, 0]^T$, R's an arbitary rotation matrix.

$E = [t_\times] R$

1) $\begin{cases} E e_B = 0 \\ E^T e_A = 0 \end{cases} \Rightarrow$ we get e_A & e_B are arbitary unit vectors

2) $\begin{bmatrix} a \\ b \\ c \end{bmatrix} = E^T \begin{bmatrix} x_A \\ y_A \\ 1 \end{bmatrix} = 0$

NO such line exists.

3) NO such H_A & H_B exist

Thus, epipolar rectification's impossible.