- a) Find  $[T]^{\alpha}_{\alpha}$ .
- b) Find the change of basis matrix from  $\alpha$  to  $\beta$ .
- c) Find the change of basis matrix from  $\beta$  to  $\alpha.$
- d) Find  $[T]^{\beta}_{\beta}$ .
- e) Find  $[v]_{\beta}$ .
- f) Find  $[T(v)]_{\beta}$ .
- g) Use the result of part (f) to find T(v).