

$$U_t = 15$$

$$U_{be1} = U_{be2} = 0$$

$$\mathbf{U}_{\mathrm{BE1}} = \mathbf{U}_{\mathrm{BE2}} = 0.6$$

$$\beta_{\text{BE1}} = \beta_{\text{BE2}} = \beta_{1} = \beta_{2} = 24$$
 $R_{\text{E}} = 72$
 $R_{\text{T}} = 60$
 $R_{\text{C}} = 40$

$$R_T = 60$$

$$R_C = 40$$

$$I_E = \frac{U_t - U_{BE1}}{R_n}$$

Out[35] = 0.2

$$ln[36]:= \mathbf{I}_{E1} = \mathbf{I}_{E2} = \frac{\mathbf{I}_{E}}{2}$$

Out[36] = 0.1

ln[37]:=
$$I_{B1} = I_{B2} = \frac{I_{E1}}{1 + \beta_1}$$

Out[37] = 0.004

In[38]:=
$$I_{C1} = I_{C2} = \beta_1 \times I_{B1}$$

Out[38]= 0.096

$$ln[39]:= \mathbf{I}_{RC} = \mathbf{I}_{C2} \times \frac{\mathbf{R}_{T}}{\mathbf{R}_{T} + \mathbf{R}_{C}}$$

Out[39]= 0.0576

$$ln[40]:=~\mathbf{U_{RC}}~=~\mathbf{I_{RC}}\times\mathbf{R_{C}}$$

Out[40]= 2.304

$$ln[41]:= \mathbf{I}_{RT} = \mathbf{I}_{C2} \times \frac{R_C}{R_T + R_C}$$

Out[41] = 0.0384

In[42]:= $\mathbf{I}_{ki} = -\mathbf{I}_{RT}$

Out[42]= -0.0384

 $ln[43]:=~\mathbf{U_{ki}}~=~\mathbf{I_{RT}}\times\mathbf{R_{T}}$

Out[43]= -2.304

In[44]:= $\mathbf{U}_{CE1} = \mathbf{U}_{t} + \mathbf{U}_{BE1}$

Out[44] = 15.6

In[45]:= $\mathbf{U}_{\text{CE2}} = \mathbf{U}_{\text{t}} - \mathbf{U}_{\text{RC}} + \mathbf{U}_{\text{BE2}}$

Out[45]= 13.296

In[46]:= $U_{BC1} = -U_{t}$

Out[46]= -15

 $ln[47]:= U_{BC2} = -(U_t - U_{RC})$

Out[47] = -12.696