



Find R_1, R_2, R_3, R_4, R_5 when V_{in} is in the 4 regions below and when $V_{in} \frac{R^*}{R_T} < 0.7$ or when $\frac{R^*}{R_T} > 0.7$ as indicated. Where $R^* = R_1$ or R_2 or R_3 or R_4 or R_5
 $R_T = R_1 + R_2 + R_3 + R_4 + R_5$

$V_{in} > 5$ → when $V_{in} > 5$, $V_{in} \frac{R^*}{R_T} > 0.7$

→ $\left\{ \begin{array}{l} V_{in} \frac{R_2}{R_T} > 0.7 \\ V_{in} \frac{R_3}{R_T} > 0.7 \\ V_{in} \frac{R_4}{R_T} > 0.7 \end{array} \right.$

$4.8 < V_{in} < 5$ when $4.8 < V_{in} < 5$ then

→ $\left\{ \begin{array}{l} V_{in} \frac{R_2}{R_T} < 0.7 \\ V_{in} \frac{R_3}{R_T} > 0.7 \\ V_{in} \frac{R_4}{R_T} > 0.7 \end{array} \right.$

$4.5 < V_{in} < 4.8$ etc...

$V_{in} \frac{R_2}{R_T} < 0.7$

$V_{in} \frac{R_3}{R_T} < 0.7$

$V_{in} \frac{R_4}{R_T} > 0.7$

$V_{in} < 4.5$

$V_{in} \frac{R_2}{R_T} < 0.7$

$V_{in} \frac{R_3}{R_T} < 0.7$

$V_{in} \frac{R_4}{R_T} < 0.7$