



Calculation

$$I_{in} \gg I_{b1} + I_{b2} \Rightarrow I_{in} \doteq I_{in1} \text{ (Assumption)}$$

$$I_{in} = 3.3V / (1k + 2.7k + 7.2k + 3k) = 0.237mA$$

$$V_{be1} = I_{in} * 7.2k = 0.237mA * 7.2k = 1.709V$$

$$V_{be2} = I_{in} * 3k = 0.237mA * 3k = 0.721V$$

$$V_{Rin} = I_{in} * 2.7k = 0.641V \Rightarrow V_{in} = 3.0626V$$

Questions

$$I_{c1} = HFE * I_{b1} = HFE1 * V_{be1} / H_{IE1} = ?$$

$$I_{c2} = HFE1 * I_{b2} = HFE1 * (I_{c1} + I_{b1} + I_{in2}) = ?$$

$$I_c = I_{c1} + I_{c2} = ?$$

$$V_{ce1} = I_{c1} * H_{OE1} = ?$$

$$V_{ce2} = I_{c2} * H_{OE2} = ?$$