3.25

Now both transistors have same $V_{be}$ since both base terminals are connected.

The emitted terminals are connected.

\[ I_1 = I_2 = I_e = 1 mA \]

Now matching transistors are:

\[ I_1 = I_2 = 500 \mu A \]

\[ V_c = V_E - I_E R_E = 5V \]

To check operation $V_{ce} = V_c - V_E$

\[ = 3 - 0.7 = 2.7V \]

Note 18 Vcc to 10 A assumption