Given the ammeter reading X,
find the value of resistance R_4.

R1 = 19 Ω

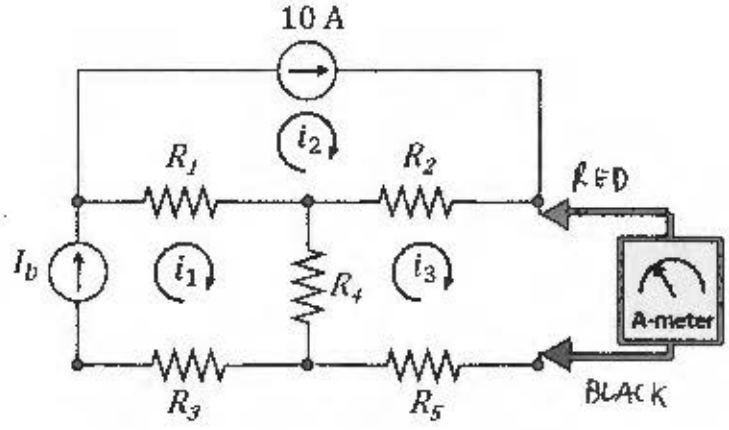
R2 = 2 Ω

R3 = 3 Ω

R5 = 2 Ω

X = 3 A

Ib = 1 A



$i_3 = X = 3$

$i_1 = I_b = 1$

$i_2 = 10$

A-METER

KVL MESH 3. $R_4(i_3 - i_1) + R_2(i_3 - i_2) + 0 + R_5 i_3 = 0$

$R_4 \cdot 2 + 2 \cdot (-7) + 2 \cdot 3 = 0$

$\boxed{R_4 = 4\,\Omega}$