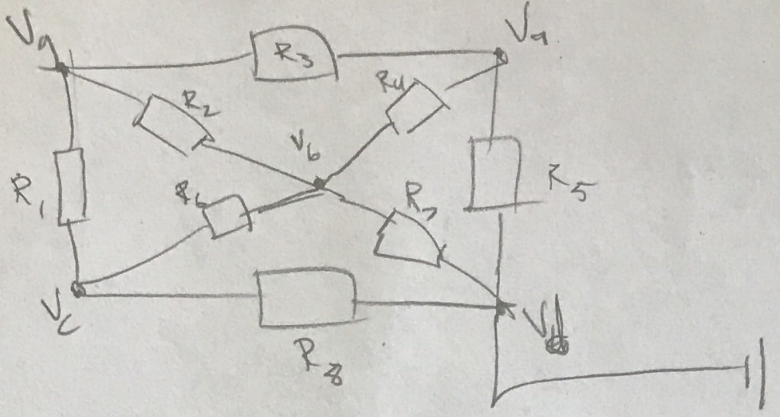
Daren Lid

Prelab



V_a) $\frac{V_a - V_g}{R_3} + \frac{V_a - V_b}{R_4} + \frac{V_a - V_d}{R_5} + \frac{V_a}{R_{10}} = 0$

V_b) $\frac{V_b - V_g}{R_2} + \frac{V_b - V_d}{R_7} + \frac{V_b - V_c}{R_6} + \frac{V_b - V_a}{R_4} = 0$

V_c) $\frac{V_c - V_b}{R_6} + \frac{V_c - V_d}{R_8} + \frac{V_c - V_g}{R_1} = 0$

V_d) $\frac{V_d - V_a}{R_5} + \frac{V_d - V_b}{R_7} + \frac{V_d - V_c}{R_8} = 0$

V_a) $\frac{V_a - V_g}{R_3} + \frac{V_a - V_b}{R_4} + \frac{V_a}{R_{10}} + \frac{V_a}{R_5} = 0$

V_b) $\frac{V_b - V_g}{R_2} + \frac{V_b - V_a}{R_4} + \frac{V_b - V_c}{R_6} + \frac{V_b}{R_7} = 0$

V_c) $\frac{V_c - V_g}{R_1} + \frac{V_c - V_b}{R_6} + \frac{V_c}{R_8} = 0$

$R_1 = 1\,K$
$R_2 = 1.5\,K$
$R_3 = 1.5\,K$
$R_4 = 1\,K$
$R_5 = 1.5\,K$
$R_6 = 1\,K$
$R_7 = 1.5\,K$
$R_8 = 1\,K$
$R_{10} = 1\,K$
$R_1 = ?$

$V_g = 12\,V$