

電路學(EE2210)第二次隨堂考

2015年9月30日

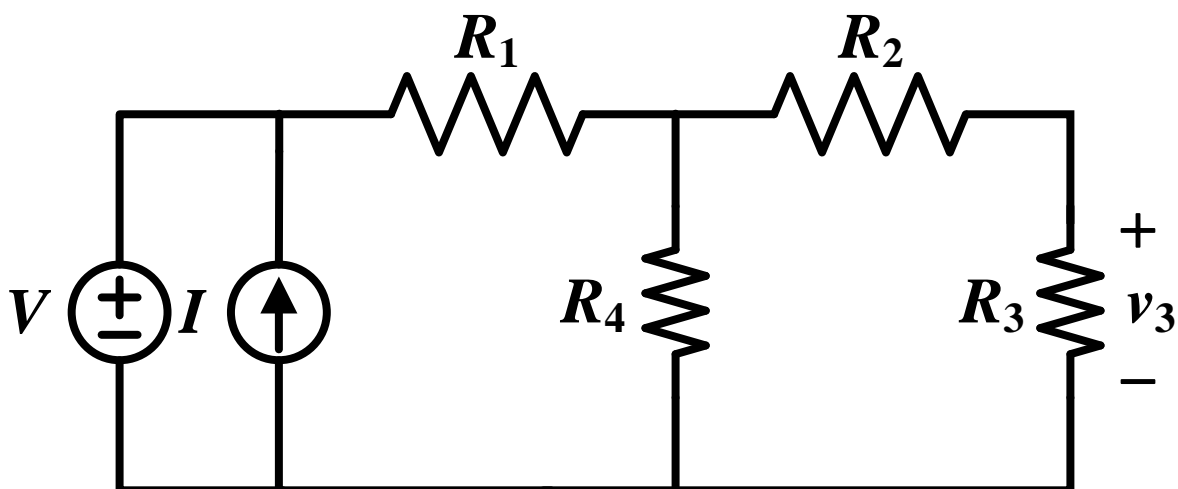
時間：10 分鐘

Close Book

學號： _____

姓名： _____

By using the element-combination rules and the collapse-then-expand method, determine explicitly the voltage v_3 in the following circuit in terms of R_1, R_2, R_3, R_4, V and I .



You don't need to consider the contribution from the current source I

$$v_3 = V \times \frac{\frac{R_4(R_2 + R_3)}{R_2 + R_3 + R_4}}{R_1 + \frac{R_4(R_2 + R_3)}{R_2 + R_3 + R_4}} \times \frac{R_3}{(R_2 + R_3)}$$

$v_3 =$ _____.