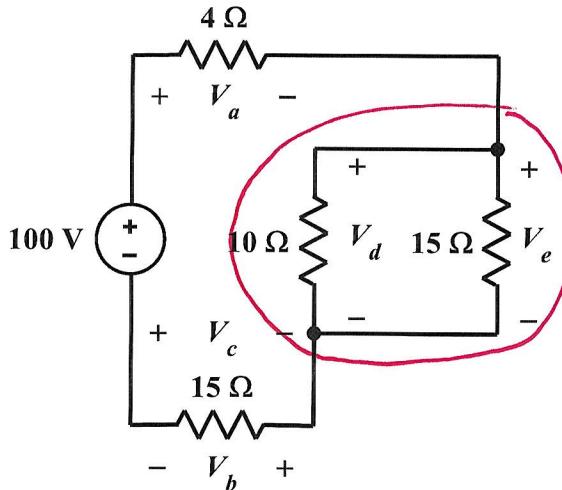


EE 2240
Homework Problem #011



$$10\Omega \parallel 15\Omega = \frac{10 \cdot 15}{10 + 15} = \frac{150}{25} = 6\Omega$$

Use equivalent resistance and the voltage divider equation to determine each of the following:

a. V_a

$$V_a = \frac{4}{4+6+15} \cdot 100V = \frac{400}{25} = 16V$$

b. V_b

$$V_b = \frac{15}{4+6+15} \cdot 100V = \frac{1500}{25} = 60V$$

c. V_c

$$V_c = -V_b = -60V$$

d. V_d

$$V_d = \frac{6}{4+6+15} \cdot 100V = \frac{600}{25} = 24V$$

e. V_e

$$V_e = V_d = 24V$$