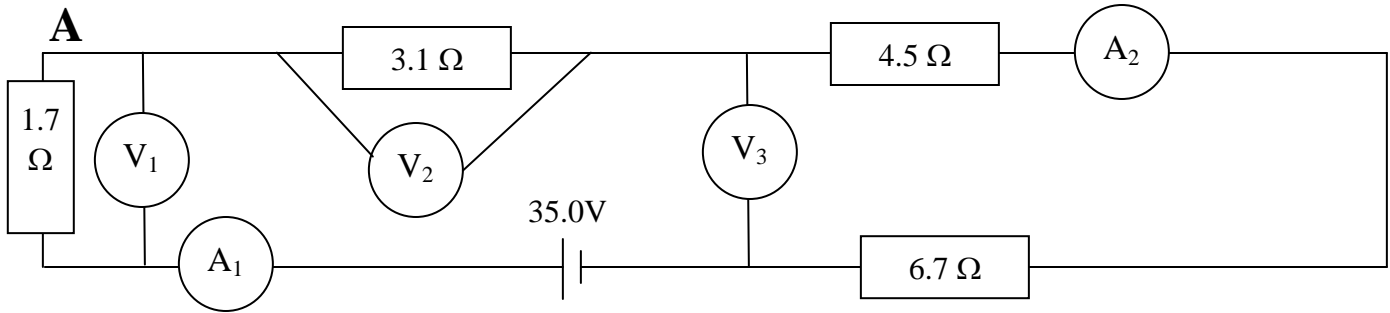


Group Work for 18FGH

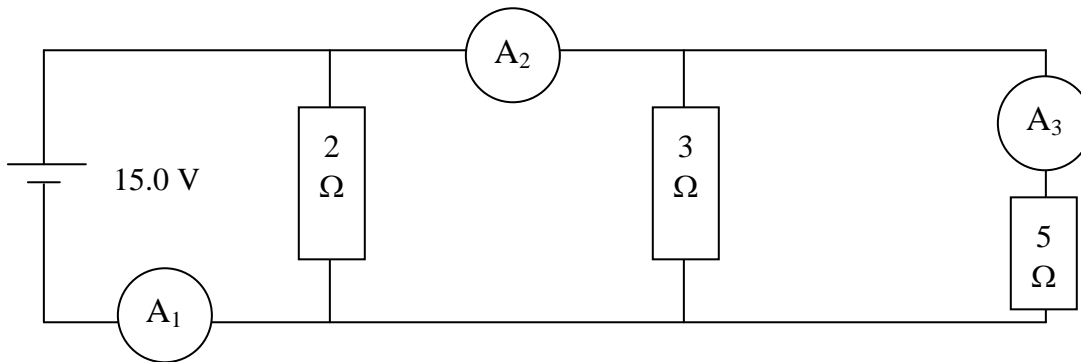
Name _____

Round your answers to three sig figs (retain five), and show your work.

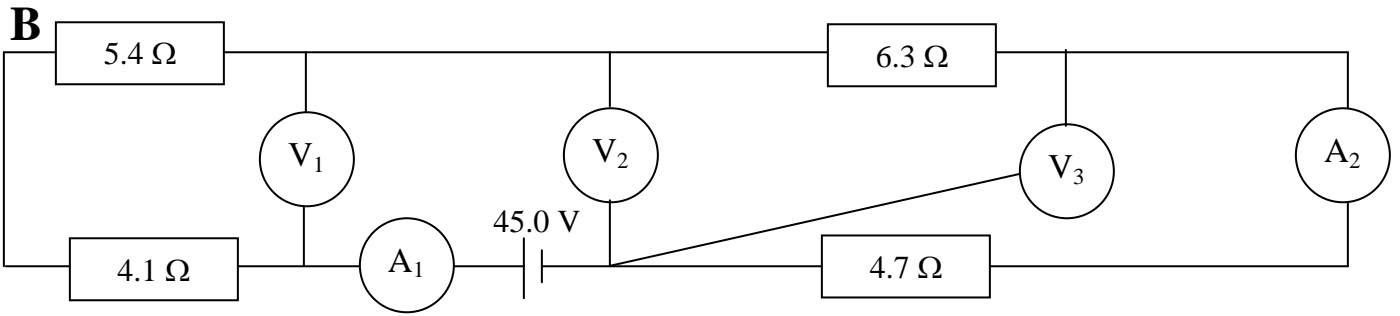
A



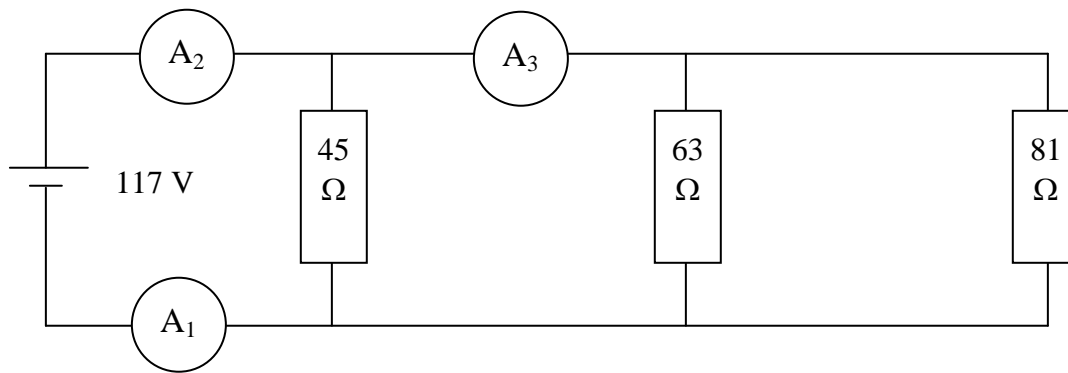
| | | |
|----------------|----------------|---|
| A_1 (2.19 A) | A_2 (2.19 A) | V_1 (3.72 V) |
| V_2 (6.78 V) | V_3 (24.5 V) | Least power dissipated by a resistor: (the 1.7 ohm: 8.13 W) |



| | | | |
|----------------|----------------|----------------|--|
| A_1 (15.5 A) | A_2 (8.00 A) | A_3 (3.00 A) | Greatest power dissipated by a resistor (the 2 ohm: 112.5 W) |
|----------------|----------------|----------------|--|

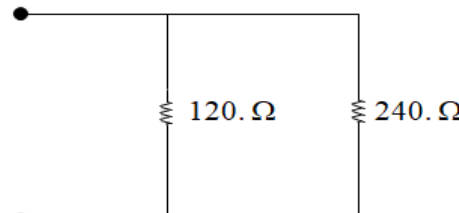
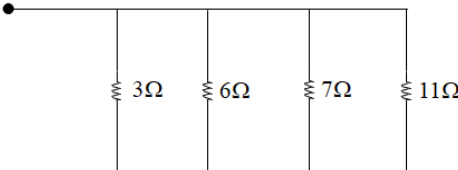
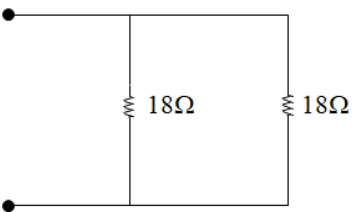
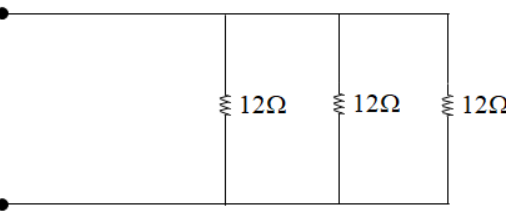
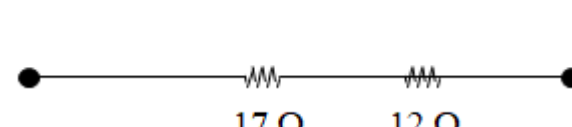
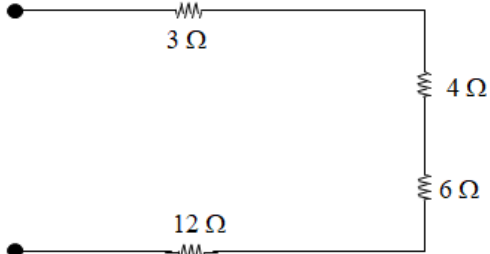
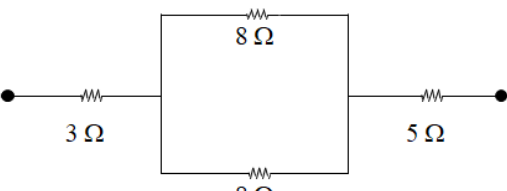
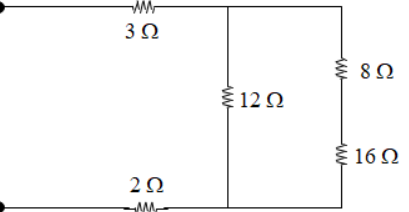
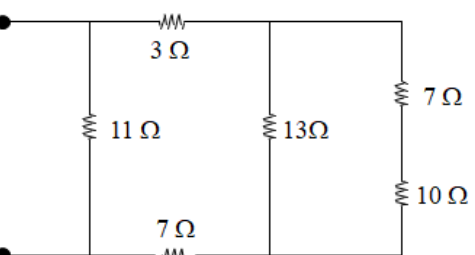


| | | |
|----------------|----------------|---|
| A_1 (2.20 A) | A_2 (2.20 A) | V_1 (20.9 V) |
| V_2 (24.1 V) | V_3 (10.3 V) | Greatest power dissipated by a resistor: (the 6.3 ohm: 30.4 W) |



| | | | |
|----------------|----------------|----------------|--|
| A_1 (5.90 A) | A_2 (5.90 A) | A_3 (3.30 A) | Least power dissipated by a resistor (the 81 ohm: 169. W) |
|----------------|----------------|----------------|--|

C Find these resistances from the black dot to the black dot:

| | |
|---|--|
|  <p>(80 Ω)</p> |  <p>(1.36 Ω)</p> |
|  <p>(9 Ω)</p> |  <p>(4 Ω)</p> |
|  <p>(29 Ω)</p> |  <p>(25 Ω)</p> |
|  <p>$3 + (8^{-1} + 8^{-1})^{-1} + 5 = 12 \text{ } \Omega$ (Challenge)</p> |  <p>$3 + (12^{-1} + (16+8)^{-1})^{-1} + 2 = 13 \text{ } \Omega$ (Challenge)</p> |
|  <p>(6.73 Ω)</p> | <p>Draw a picture of a pretty pony here:</p> |