

## Voltages and Currents

1. Label the voltages at the nodes showing in the following figures:

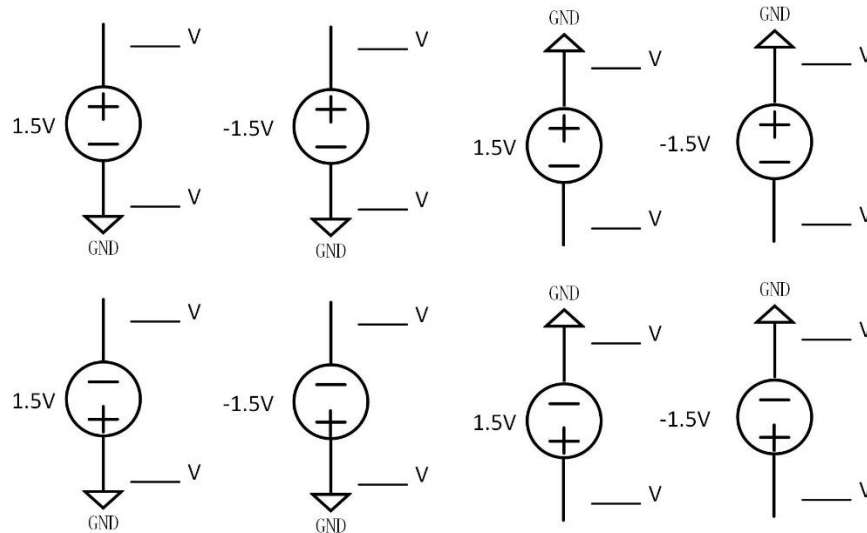


Fig. 1

2. Complete the following circuit to provide a +5 and -5 power supply:

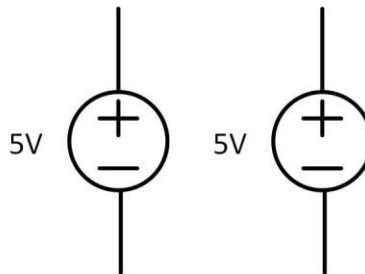


Fig. 2

3. Solve the  $V_{out}$  of the following 'Voltage Divider'. Instead of calculating the current first, what is the express way to calculate it if you know it is a Voltage Divider?

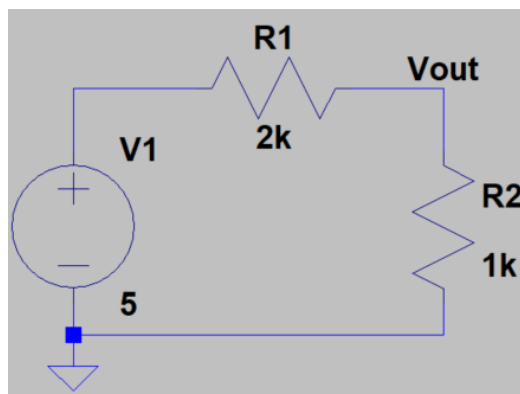


Fig. 3

4. Find the voltages  $V_x$  and  $V_s$  in each of the following circuits.

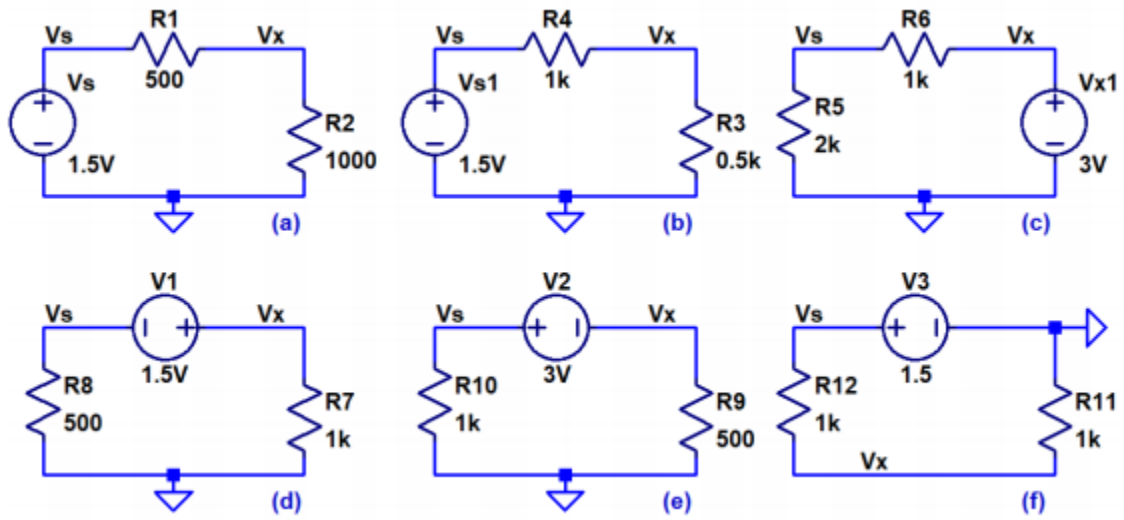


Fig. 4