

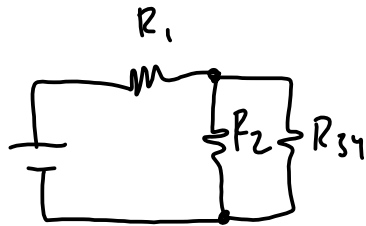
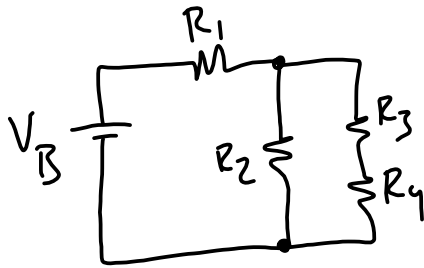
## SCHEDULE

- Due Tuesday, 5/9
  - Energy Project Presentation Questions
  - Quiz on Power Plants
  - Heat Transfer and Earth's Heat Balance
  - Climate Change Article Questions
- Wednesday (5/10) - Friday (5/12)
  - Waves
  - Quiz - Friday (5/12)
- Friday (5/12)
  - Level 4 Work
  - Test Corrections from Circuits Test
- Monday (5/15) - Friday (5/19)
  - Monday → Review
  - Tuesday → Senior Awards (Others review)
  - Wednesday → Senior Picnic (Others review)
  - Thursday → Review (Exemption slips)
  - Friday → Exam (everyone)
- Monday (5/22) - Friday (5/26)
  - More waves + optics
  - Quiz → Friday (5/26)

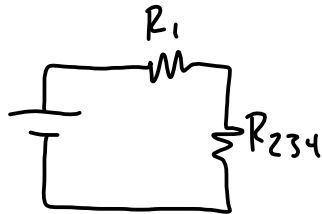
# ENERGY PRACTICE PROBLEMS

- Emf  $\rightarrow$  electromotive force  $\rightarrow$  electric potential  
( $\mathcal{E}$ )  
 $\rightarrow$  measured in volts
- Ways to create Emf (Faraday's Law):
  - $\text{Emf} = N A B \omega$ 
    - $\rightarrow$  rotational velocity
    - $\rightarrow$  magnetic field strength
    - $\rightarrow$  number of turns in a coil of wire
    - $\rightarrow$  cross-sectional area

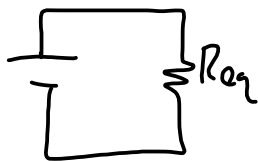
# TEST QUESTION



$$R_{34} = R_3 + R_4$$



$$\frac{1}{R_{234}} = \frac{1}{R_2} + \frac{1}{R_{34}}$$



$$R_{eq} = R_1 + R_{234}$$

$$= 38.33 \Omega$$

$$I_{total} = \frac{V_B}{R_{eq}}$$

Use ideas about current and voltage to work back through circuit and calculate

$I$ ,  $V$ , and  $P$