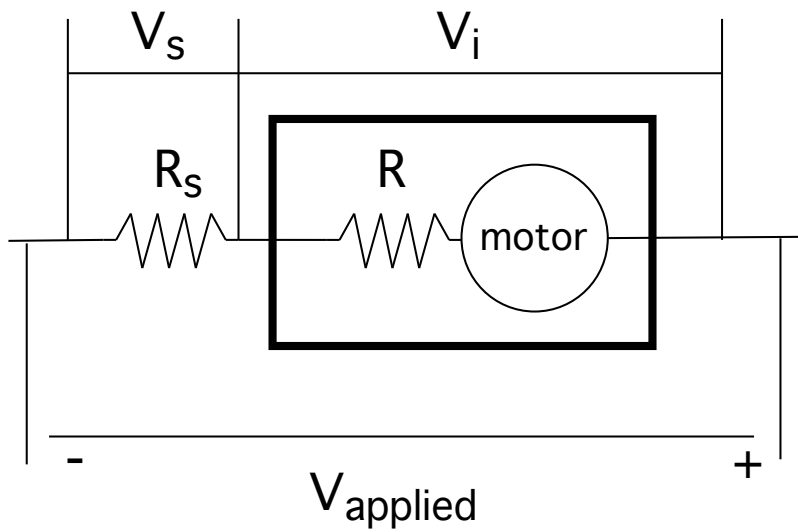


MAE156A – Winter 2014, measuring motor characteristics, due Jan 28th



Go to office hours and use the experimental setup provided for you. Make the appropriate measurements then calculate:

K_m , K_e , R , I_1 , I_2 , $\omega_{1-\text{max}}$, $\omega_{2-\text{max}}$, $I_{1-\text{max}}$, $I_{2-\text{max}}$, $T_{1-\text{max}}$, and $T_{2-\text{max}}$

Plot efficiency of the actual motor as a function of ω for both cases measured. Do not assume ideal conditions, internal resistance torque needs to be included.