Physics 12 Section 21-6 Counter EMF

- 1. When a motor turns you would expect it to accelerate indefinitely. Fortunately this is not the case.
- 2. The load is what the motor is trying to move and



3. In the above example the current is going in the counter clockwise direction. The back EMF is going in the clockwise direction. The two currents stabilize.

Example p632: the armature windings of a DC motor have a resistance of 5.0Ω . The motor is connected to a 120V line, and when the motor reaches full speed against its normal load, the counter

EMF is 108V. Calculate the current into the motor when it is just starting up and the current when it reaches full speed.