

2008 Magnetism In Class Review 1

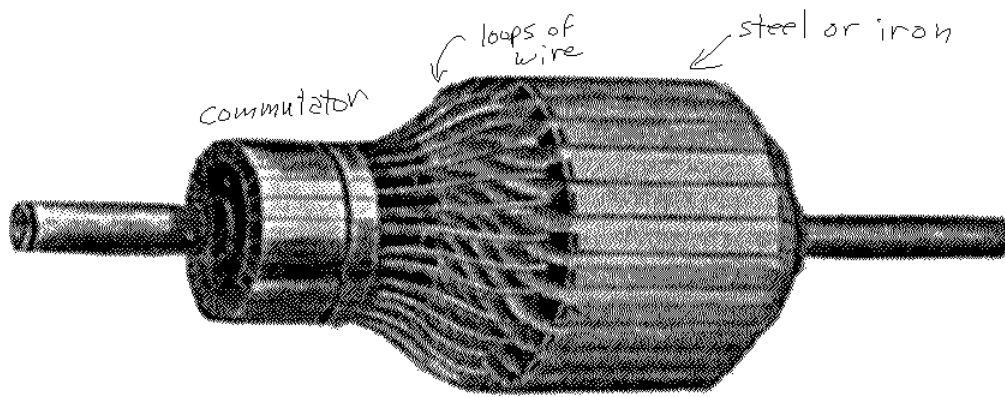
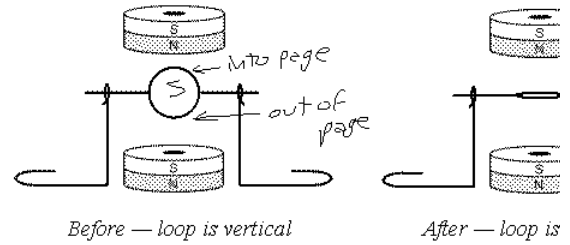
10. The diagram shows a wire loop with electricity flowing around thru it.

A. If the top of the loop is moving into the page, on the first diagram label the part facing you as a N or a S pole.

B. In the first diagram, which direction is electricity flowing in the loop? *CW*

C. If the electricity stays on after the loop has turned, what happens? *sticks to N*

D. What would the loop need to keep moving? *commutator*



11. The picture above is of the armature (moving part) of a motor.

A. Label the loops of wire and the commutator.  
 B. Why is there iron or steel in between the loops of wire?

*amplifies B*

C. How does the motor work?

E. What does the commutator do?

12. To make it a step-down transformer, which side would be the input voltage?

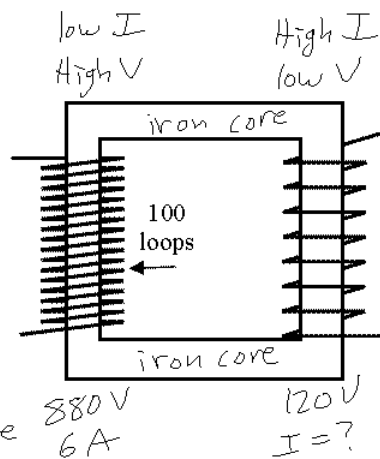
13. To make it a step-up transformer, which side would be the primary?

14. How does the amount magnetic flux compare on both sides? *same*

15. Which side has the most current? *R*

16. What is the square thing inside the coils? *iron core*

17. What does it do?



$$\frac{V_p}{V_s} = \frac{N_p}{N_s}$$

18. If the input voltage is 120 V A the output voltage is 880 V AC the number of loops on the rig

$$\frac{880}{120} = \frac{100}{N} \quad N = \frac{1}{13.3} \approx 13.3$$

19. If the output current is 6 amps input current.

$$V_s I_s = V_p I_p$$

$$880(6) = 120(I)$$

20. What is the output voltage if the side is hooked up to a 9 v batt

*0.11k*

amplifies B

*cstephenmurray.com*

coil  
battery is DC

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