

## **RULES FOR SOLVING PHYSICS PROBLEMS - Mr. Ward - 2003-2004**

### **Rule 00:**

Use UNLINED 8.5 x 11 paper for ALL HANDED IN problems.

### **Rule 0:**

Do problems in PENCIL; erase, DON'T SCRATCH OUT minor errors.

### **Rule 1:**

Write the GIVEN info and UNKNOWN with correct SYMBOL & UNITS.

### **Rule 2:**

Draw DIAGRAM or FBD when needed.

### **Rule 3:**

Convert all the units to MKS UNITS.

### **Rule 4:**

Write down the BASIC EQUATION.

### **Rule 5:**

REARRANGE the equation to SOLVE FOR UNKNOWN on the LEFT.

### **Rule 6:**

Write ONLY 1 (ONE) EQUAL SIGN PER LINE.

### **Rule 7:**

ALIGN all EQUAL SIGNS and EQUATIONS VERTICALLY.

### **Rule 8:**

SUBSTITUTE KNOWN VALUES, with UNITS, into the WORKING equation.

### **Rule 9:**

Use correct UNITS in all parts of the problem.

### **Rule 10:**

Answer must have SYMBOL, EQUAL SIGN, NUMBER, and correct UNITS.

### **Rule 11:**

Put FINAL ANSWER on a LINE BY ITSELF.

### **Rule 12:**

ROUND to proper number of SIG FIGS, usually THREE.

### **Rule 13:**

DOES THE ANSWER MAKE SENSE? If "YES", BOX IT!

### **Rule 14:**

Numbers must begin with a DIGIT from 0 to 9, not a DECIMAL POINT.

### **Rule 15:**

No COMMAS in numbers. No DOTS or 'X' to multiply or '/' to divide. Use ( ).

### **Rule 16:**

Use SCIENTIFIC NOTATION when NUMBER in exponent is  $<-2$  or  $>2$ .