AP 1 AP Test Formulas.gwb - 1/1 - Wed Apr 222015 10:09:51

| Kimematics$x=x_{i}+\frac{\left(v_{i}+v_{f}\right)}{2} t$ |  |
| :---: | :---: |
| Projective $\begin{aligned} & \lambda / V_{\cos \theta}^{J} V \sin \theta \\ & x=V \cos \theta t \\ & t=\frac{2 V \sin \theta}{g} \end{aligned}$ | $\begin{array}{ll} \text { offuiff } & \text { Tat =mav } \\ t=\sqrt{\frac{2 h}{g}} & W=\Delta K E \\ x=v t & \end{array}$ |
| $\text { Forces } \begin{aligned} F_{l} & =F_{g} \sin \theta \\ F_{+} & =F_{g} \cos \theta \\ F_{c} & =\frac{m v^{2}}{r} \end{aligned}$ |  |
| $\begin{aligned} M E_{i} & =M E_{s} \\ U_{y}+K_{i} & =U_{2 f}+K_{f} \end{aligned}$ |  |
| Pendulum $h=L-L \cos \theta$ |  |
| siPowar $P=\frac{f_{d}}{t} \quad P=F_{v}$ |  |
|  |  |
| $\text { rotation } \begin{aligned} \omega_{+}^{2} & =\omega^{2}+2 \alpha \theta \\ v_{+} & =r \omega \\ a_{+} & =r \alpha \\ I=\sum_{n} m r^{2} & \end{aligned}$ |  |
|  |  |
| mass on spring$\frac{1}{2} m v_{i}^{2}+\frac{1}{2} k x_{i}^{2}=\frac{1}{2} m v_{f}^{2}+\frac{1}{2} k x_{f}^{2}$ |  |
| Standing waves, $f_{n}=n \frac{V}{2 L}$ and open eipe $\quad$ nv closed $f_{n}=n \frac{n v}{4 L} 1,3,5$$f_{\text {beat }}=\left\|f_{1}-f_{2}\right\|$ |  |
| Elect. Power$\begin{aligned} & P=I^{2} R \\ & P=\frac{V^{2}}{R} \end{aligned}$ |  |

