Sample Calculation for trial # 2.

Measured acceleration: a= $\frac{Vf-vi}{TAB}$ = $\frac{\left(\frac{0.05}{TB}\right)-(\frac{0.05}{TA})}{TAB}$

 $\frac{\left(\frac{0.05}{0.1066}\right)-(\frac{0.05}{0.2089})}{1.188}$ =0.193

Calculated acceleration: $\sum\_{}^{}F=ma$

 Fg + T-T= (mh+mc) a (mc=0.668)

 a= $\frac{Fg}{(mh+mc)}=\frac{mhg}{(mh+mc)}$

 $\frac{0.1×9.8}{0.1+0.668}$ =1.276

% Error $=\frac{Measured-Calculated}{Calculated}$ ×100

 $\frac{0.193-1.276}{1.276}$ ×100 = -84.87