Physics Cheatsheet

vec v = {2%pi r} over T newline

vec a = {vec v}^2 over r = {4%pi r} over T^2 newline

sum vec F = {m {vec v}^2} over r = {4 %pi^2 m} over T^2 newline

F= {GM_1 m_2} over {R^2} newline

F prop m_1,m_2 newline

F prop 1 over R^2 newline

g = {GM_1} over R^2 newline

v = {2%pi R} over T newline

a = v^2 over R = {4%pi ^2 R} over T^2 = {GM} over R^2 = g newline

F_g = mv^2 over R = {4m%pi ^2 R} over T^2 = {GMm} over R^2 = mg newline

v = {2%pi R} over T newline

GM over 4%pi^2 = R^3 over T^2 newline

Energy Change is area under Force distance graph newline

%DELTA E = from a to b int {GMm over R^2} %delta r newline

Electricity newline

V=I on R newline

P=VI = V^2 over R newline

I=%DELTA(+Q) over t newline

R_t(series) = R_1 + R_2 + ... + R_n newline

R_T(parrallel) = 1 over {1 over R_1 + 1 over R_2 + ... + 1 over R_n} newline

C=Q over V newline

PHOTONICS newline

y(t) = Y_o* dot sin(2 %pi ft)