Introduction to physics, mechanics and project

Physics is the most fundamental science, describing mechanical motion of solids and fluids, thermodynamics, electromagnetism, quantum mechanics, relativity theory, etc.

Significant figures are needed to use appropriate accuracy and precision in numbers, describing measurements. Use Atlantic rule and Pacific rule to determine number of significant figures.

How many significant figures are there in your T number?

To find equations of velocity and acceleration using the equation of displacement, differentiate the equation once to find the velocity, differentiate the equation of displacement twice or equation of velocity once to get the equation of acceleration, differentiate with respect to time t.

Find velocity and acceleration for one-dimensional motion with the equation x = -k + Lt + Tt2.

Describing the inelastic collision, we assume that the momentum is conserved. The material points stick together after collision and move with the same velocity. We consider one-dimensional motion.

Calculate the final speed after absolutely inelastic collision of two balls of masses L kg and T kg, moving with velocities s m/s and k m/s respectively.

http://physics16.weebly.com/uploads/5/9/8/5/59854633/inelastic4collision.txt

Projectile is a material point, moving under the influence of gravity in two-dimensions. We solved differential equations of Second Law of Newton, using the initial conditions to determine the integration constants.

Find Maximum x, Maximum y; find x and y at time = T seconds, for angle of release A = T degrees, initial velocity V0 = T meters per second, x0 = y0 = 0 meters for projectile.

physics16.weebly.com/uploads/5/9/8/5/59854633/projectile309task2019.txt

Your project can be about any topic in physics, which you like or interested in. You may present your project to the audience.