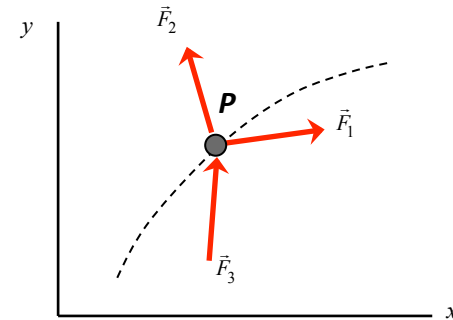


Summary: Linear Impulse-Momentum Equation 2

FUNDAMENTAL equation: the linear impulse-momentum equation:

$$m\vec{v}_2 = m\vec{v}_1 + \int_1^2 (\sum \vec{F}) dt$$



SOLUTION PROCESS:

1. Draw free body diagram (FBD) for system of your choice. As mentioned before, make your system as “large” as possible.
2. Write down the impulse-momentum equation.
3. Write down the appropriate kinematics (velocity) equations for the problem.
4. If you have enough equations, solve for the desired unknowns. If you do not have enough equations, then you have probably missed some information from kinematics.