

Collisions

Momentum (p) = mv

Recall: $F = ma = m \frac{\Delta v}{\Delta t}$

$\therefore F \Delta t = m \Delta v = \Delta p = I$

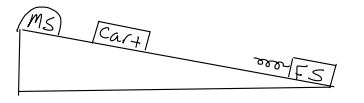
Impulse \equiv Area under curve

Hard vs Soft Collisions

Thin Spring - Soft

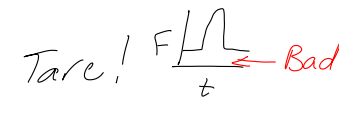
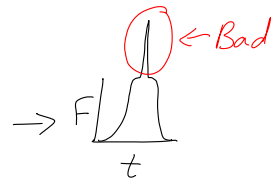
Thick Spring - Hard

Bumper - Harder



FYI

- 1) Use small incline
- 2) Start w/ thin Spring ensure it doesn't bottom out
- 3) Always start from same position
- 4) Ensure F starts @ 0! Tare!



Graphs

