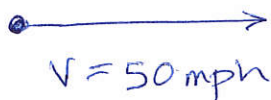
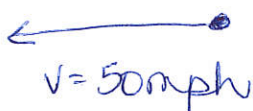


# Myth Busters video notes: Car collisions

Scenario

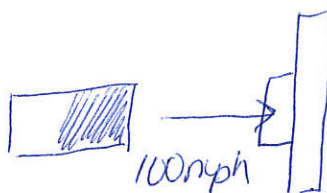
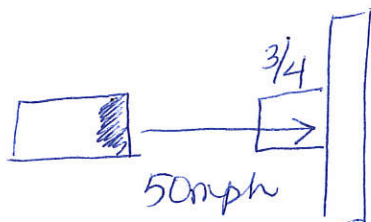


$$p = mv$$

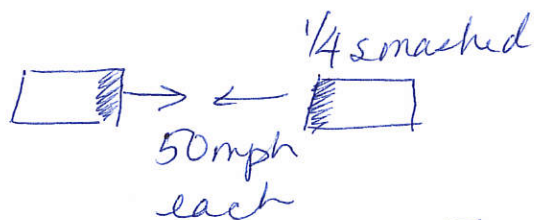


$$p = mv$$

1<sup>st</sup> exp.



$$KE = \frac{1}{2}mv^2$$



vs

Elastic

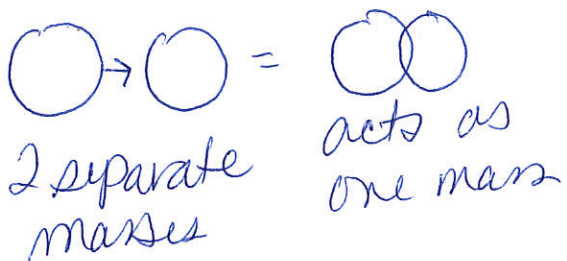
transfer of momentum

"doesn't lose  $p$ "

→ total  $p$  was conserved

Inelastic

Collision with no "recoil"



- "lose energy" because converting in the transfer of momentum

- sound
- heat
- deformation

(ex) Newton's cradle

Bounce off each other

ex. Billiards