



Physics 231 - 1-Oct-99



- Impulse
- Momentum
- Momentum Conservation
- Collisions
- quiz

Impulse



■ $P = F \cdot t$

Momentum



- $P = mv$

- Momentum Transfer

Momentum Conservation



Collisions

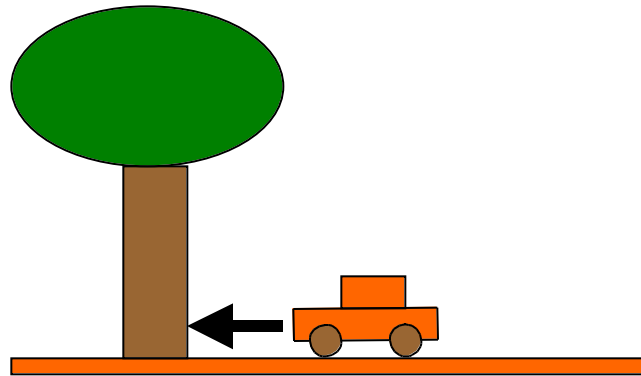


Q1 - Answer = c

Q2 - Problem A - Last name A-K

A 70 kg passenger in a car going 40 mph (18 m/s) crashes into a tree. If it takes the car 0.125 s to stop, what is the average force on the passenger?

- A. 144 N
- B. 560 N
- C. 1260 N
- D. 2800 N
- E. 10^4 N



Q1 - Answer = c

Q2 - Problem B - Last Name L-Z

■ An 80 kg passenger is in a car at rest that is struck in the rear by another car. As a result of the collision, which lasts 0.15 s, the struck car moves off at 11 m/s. What was the average force on the passenger?

A. 5867 N

B. 4840 N

C. 132 N

D. 12 N

E. 1 N

