

classwork 3/10

- 1) The speed of a particle is doubled, by what factor does the momentum increase?
- 2) A pitcher ~~the~~ claims that he can throw 0.145 kg baseball with as much momentum as a 3.0 g bullet moving at speed of 1500 m/s. what is the speed of the baseball?
- 3) A 0.42 kg soccer ball is moving downfield with a velocity of 12 m/s. A player kicks the ball so that it has a final velocity of 18 m/s downfield.
Find the constant force exerted by the player's foot on the ball if the two are in contact for 0.020 sec.

~~Ans~~ $p = mv$

$$\Delta p = F \Delta t$$