9.7. The impulse-momentum theory states that a change in an object's momentum results when a net force is applied to the object for some time interval, $\Delta p_x = (F_{avg})_x \Delta t$. Stopping a hard ball requires changing its momentum from some to none. That change can be accomplished with a small force over a long time interval or a large force over a short time interval. The padding in a glove lets the time interval during which the ball is stopped be long, resulting in a smaller force on the glove and your hand.