

Answer to Question #85689, Physics / Mechanics | Relativity

Impulse is defined as force applied to a particle for a certain period of time.

$$I = F\Delta t$$

$$I = \Delta P = m\Delta v$$

$$I = 0.50 \times (-12.5 - 15)$$

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$$I = -13.75 \text{ kgm/sec}$$

Negative sign shows that force on the wall is opposite to force on the ball

Again

$$I = F\Delta t$$

$$\text{Thus time} = I/F = 13.75/1100 = 0.0125 \text{ second}$$

Answer provided by <https://www.AssignmentExpert.com>