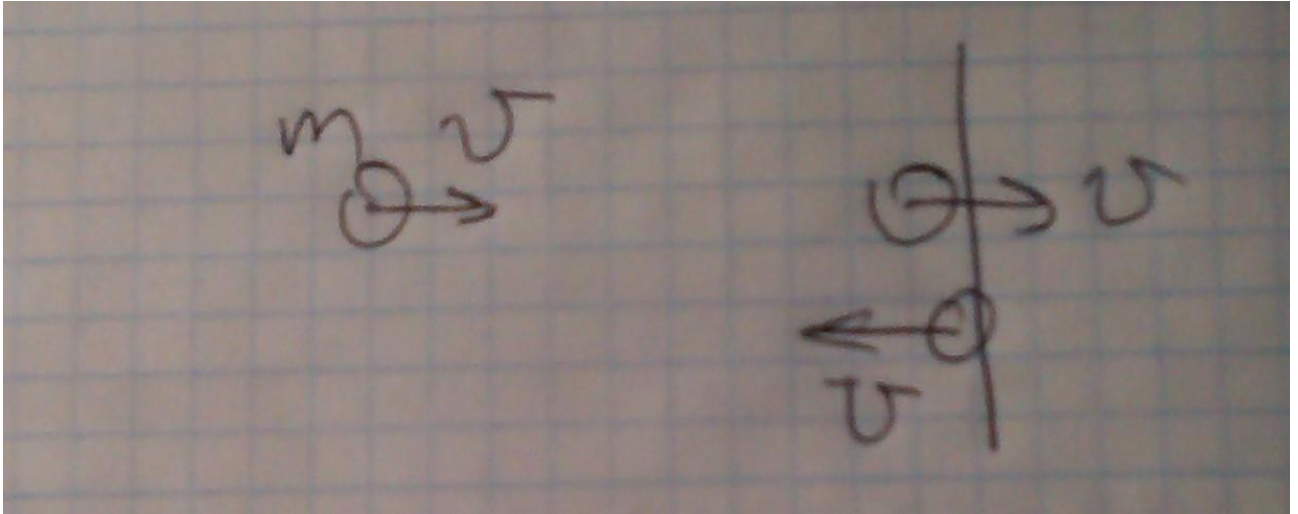


### Question #55315

$M=500\text{ g}$ ;  $V=10\text{ m/s}$ ;  $dt=0,1\text{ sec}$

F - ?



We write Newton's second law to strike the wall:

$M \cdot dV/dt = F$ , where  $dV = V - (-V)$  is absolute change of speed during the strike,  $dt$  – time of collision.

Then  $F = 2M \cdot V/dt = 2 \cdot 0,5 \cdot 10/0,1 = 100\text{ N}$

Answer:  $F = 100\text{ N}$ .

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