| Name: |  |
| :--- | :--- |
| ID: |  |
| Total Score (out of 10 pts): |  |

$-4 / 10$ points for attending-

## Question 1 (6/10 points)

Two solid spheres of masses $m_{a}=10.0 \mathrm{gr}, \mathrm{m}_{\mathrm{b}}=30.0 \mathrm{gr}$ collide elastically with each other. Velocities of each sphere are given as $v_{a}=2 \mathrm{~m} / \mathrm{s}$ towards right and $\mathrm{v}_{\mathrm{b}}=4 \mathrm{~m} / \mathrm{s}$ towards left before the collision. Find the velocity of each sphere after the collision.

