

Take-home Assignment

Name _____

Lab Partner: _____

- 1) Complete the tables below. Use a pencil.
- 2) This information should also be easily found in your log book.
- 3) Answer questions on the back of the page.
- 4) Hand in this sheet AND put an Excel Spreadsheet in the Class Drop Box.

| Initial | | | | |
|---------------------|---------------|---------------|------------------------|-------------|
| Property | Puck A | Puck B | Complete System | Unit |
| m | \pm | \pm | \pm | |
| v_x | \pm | \pm | \pm | |
| v_y | \pm | \pm | \pm | |
| p_x | \pm | \pm | \pm | |
| p_y | \pm | \pm | \pm | |
| $ p $ | \pm | \pm | \pm | |
| θ | \pm | \pm | \pm | |
| KE_{trans} | \pm | \pm | \pm | |

| Final | | | | |
|---------------------|---------------|---------------|------------------------|-------------|
| Property | Puck A | Puck B | Complete System | Unit |
| m | \pm | \pm | \pm | |
| v_x | \pm | \pm | \pm | |
| v_y | \pm | \pm | \pm | |
| p_x | \pm | \pm | \pm | |
| p_y | \pm | \pm | \pm | |
| $ p $ | \pm | \pm | \pm | |
| θ | \pm | \pm | \pm | |
| KE_{trans} | \pm | \pm | \pm | |

5) Discuss which of the 24 properties in the table were expected to be conserved in this experiment, and how closely those expectations were met. Be aware that a discussion is not a list; include *reasons*.

6) Answer question 1 on page 37 of the lab manual.