

- The booklet contains 8 pages, printed two-sided.
- If you run out of room, use pages 7-8 and indicate clearly.
- Do not tear any pages from the booklet.
- Place your student ID at the front, right-hand corner of your desk.

Permitted Aids:

- Non-communicating/non-programmable calculator (specific models listed).
- One 8 1/2" x 11" aid sheet, any color, written on both sides.
- Ruler, Protractor.

Problems:

1. **Projectile Motion:**

- **1a:** Determine the magnitude of the initial velocity of a ball thrown at an angle of 30.5°.
- **1b:** Determine the minimum radius of curvature of the ball's trajectory.

2. **Ski Jumper Analysis:**

- **2a:** Find the velocity of the skier before leaving the jump using given coordinates.
- **2b:** Find the velocity using an x-y coordinate system.
- **2c:** Find the acceleration of the skier in given coordinates.
- **2d:** Find the acceleration in x-y coordinates.
- **2e:** Calculate the distance of the jump, considering the skier's motion after leaving the ramp.

Pages 7-8 are spare pages for additional work if needed.

If you have any specific questions about the problems or need further assistance, feel free to ask!

 Copy

2 of 30 responses


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Can you help with problem 1a?

What is the best way to approach these problems?

Explain how to use the aid sheet effectively.

 View prompts

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Ask me anything...

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