

NORTHERN ILLINOIS UNIVERSITY
PHYSICS DEPARTMENT

Physics 162 – Introductory Astronomy

Fall 2025

Problem Set #9

Problem Set Due: Thurs., Nov. 13, 2025

Read OpenStax: Chapter **25**

There will be a Quiz #3 on Week of Nov 17-23

Show explicitly all your work for full credit.

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|------------------------|------------------|
| 1. Expert TA: 25.1.2 | multiple choice |
| 2. Expert TA: 25.1.10 | multiple choice |
| 3. Expert TA: 25.1.14 | multiple choice |
| 4. Expert TA: 25.1.15 | multiple choice |
| 5. Expert TA: 25.1.20 | multiple choice |
| 6. Expert TA: 25.1.24 | multiple choice |
| 7. Expert TA: 25.1.33 | multiple choice |
| 8. Expert TA: 25.1.36 | multiple choice |
| 9. Expert TA: 25.2.1 | show calculation |
| 10. Expert TA: 25.3.2 | draw figure |
| 11. Expert TA: 25.6.1 | true/false |
| 12. Expert TA: 25.6.20 | true/false |

Various ways to get your 5% grade (see Syllabus) (Due Date: Dec 12, midnight):

- (a) One visit to the NIU Observatory (have the TA email me of your attendance)
or
(b) Upload to Blackboard a one-page paper on some aspect of astronomy that interests you.

The Observatory Manager to get in touch with for reservations is: Jeremy Benson
Office is in the Physics Dept.: FW 202A

Phone #: 815-753-1953 Email address: jjbenson@niu.edu

WebPage: <https://www.niu.edu/clas/physics/observatory/index.shtml>

It is generally open to the public on Wednesdays from 6pm-8pm.

You will need to make arrangements with Jeremy Benson before showing up, and he could open it on other days as well. Make certain he emails me your name so that you can get full credit. If on the day you visit it is overcast, you still get full credit for a tour of the observatory.