Context for Quiz A Module 2



All quiz questions will refer to and will be based upon the image below.

(Image credit: Dennis Wilkinson, <u>CC BY-NC-SA 2.0 (https://creativecommons.org/licenses/by-nc-sa/2.0/legalcode)</u>)



Image description:

A magnifying glass stands on dresser in front of a wall. There is a lamp on a nightstand on the opposite side of the room. Three images of the lamp are visible in the photo. The magnifying glass behaves as a lens (any question that refers to "the lens" is referring to the magnifying glass).

Logistics

The quiz will open on February 3 at 11:35am and end 25 minutes after you start, or at 12:05pm, whichever comes *first*. (All times are Toronto time.) It thus comes after Quiz B for Module 1. It will appear on Quercus as an assignment called "Quiz 2a" under "Module 2".

The quiz will consist of 6 questions: 4 conceptual questions and 2 quantitative questions. You will see one question at a time, and you may return to a question after you have answered it. You may also ask questions about wording by posting to instructors on Piazza during the quiz. After completing all 6 questions you must click **Submit Quiz** before the time has ended. The time allocation is 4 minutes per question.

Question formats may include:

- Multiple choice
- Multiple select (choose all that apply)
- Dropdown menu / Multiple dropdowns
- Numerical answer (units and significant digits for your answer would be provided in the question statement; please enter just a number with the stated number of significant figures)

You will be asked to select or enter the **best answer or answers** for each question.

Academic Integrity:

Please be sure to leave and close all group chats or social media with classmates prior to the start time of the quiz (Feb. 5 11:05am Toronto time). Discussing the quiz questions during the quiz with anyone other than Prof. Sealfon and Nariman is a violation of academic integrity. If you need clarifications of the questions during the quiz, Prof. Sealfon will be monitoring private questions on Piazza and will also be in the PHY132 Zoom Room.

Allowed aids include your notes, textbook, calculator, and non-communicating webpage resources on the web (e.g. anything you could have downloaded before the quiz started). You may interact with Prof. Sealfon during the quiz if you have any questions about the phrasing of a question.

Suggested Studying Strategy:

Before the quiz begins, you are welcome and encouraged to discuss and analyze the above image with your classmates. Building on your classwork, consider how you might apply the learning_goals for Module 2 to what you observe in the image. Use your magnifying glass from your Practicals kit and recreate the three images using a lamp (or other light source) and a wall (or other flat surface), so you can explore what is going on. Think about what diagrams you could use to represent what you see in the image, and draw them. Think about what measurements you could estimate using the image. Think about what mathematical representations you could apply to the image, and perform the calculations. Make sure you understand the reasoning behind your results.

I strongly encourage you to create an aid sheet summarizing your analysis of the image, and to keep your aid sheet handy during the quiz, to reduce your time pressure and stress during the quiz.