How should I respond to the PCA JiTT question?

Included in every PCA you will find the following question:

What concepts are you currently having most difficulty with in our class? What would you like to see explained in class?

It is based on your responses that I (the professor) will decide what to discuss in the following class. This type of teaching in called Just in Time Teaching (JiTT) and it can be incredibly powerful because it allows you - the student - to decide what are the hardest concepts we should work on in class. Three 50-minutes lectures a week is not nearly enough to allow us to cover everything in the textbook, so it is up to us to make our time together as productive and helpful as possible.

To think about what to write, ask yourself:

What (in this chapter/PCA) isn't making sense? And WHY doesn't it make sense?

And make sure that your question is specific enough so that I can help you.

Below is a list typical mistakes students make when answering this part of the PCA to help you avoid those pitfalls.

Off topic responses

when are your office hours?

PCA IS NOT THE RIGHT VENUE FOR THESE TOPICS - COME SEE ME INSTEAD :-)

Responses that are too broad

In regards to the PCA probably the last two questions, because I have never seen a problem in physics where we take the reciprocal of a number. In regards to the homework I would probably say acceleration/velocity based problems, more specifically the one where we drew lines parallel to the initial lines.

Responses that are too good to be true

I have no questions for this part of the class. The homework was very easy to complete.

IF THAT IS REALLY THE CASE, EXPLAIN EITHER (1) WHAT YOU HAD DIFFICULTY UNDERSTANDING WHEN YOU WERE FIRST LEARNING THIS MATERIAL, OR (2) WHAT YOU THINK YOUR CLASSMATES WILL HAVE DIFFICULTY WITH.

Almost there there ...

I didn't fully understand the questions for wet and dry snow in problem 6 at the pre-class assignment.

And here are some examples of responses that are useful because I know how (in our limited amount of time) to help you make sense of what is confusing:

I am having trouble understanding what the displacement of an object is. Does it mean the space or distance between a final point and initial point? I also don't understand the "turning point" of an object. My most basic understanding is that it is when an object turns around from its initial direction. What happens to the object's velocity and acceleration when it reaches this point, and what does it look like on a graph?

I keep getting confused between velocity and acceleration. Shouldn't an object with negative acceleration be slowing down?