

Physics 121 – August 28, 2009

Assignments:

This week:

- Read syllabus carefully – **course notes are posted online at www.nmt.edu/~krm**
- Read Chapter 1 of textbook
- Get iclicker, register clicker online
- Register for Mastering Physics online
- Complete Mastering Physics Intro assignment due by Sunday, Aug 30 @ 11pm.

Next week:

- Read Chapters 2 and 3 of textbook
- Homework/recitation problems due 9/4:
Chapter 2 - #45,46,53,55,56,59,63,71

What is the number of air molecules in this room (order-of-magnitude)?

- A. 700 billion (7×10^{11})
- B. 10 trillion (1×10^{13})
- C. 6×10^{23}
- D. 10^{29}
- E. 10^{44}

What is the number of air molecules in this room (order-of-magnitude)?

- A. 700 billion (7×10^{11}) – this is the dollar amount in TARP
- B. 10 trillion (1×10^{13}) – national debt!
- C. 6×10^{23} -- about one mole
- D. 10^{28} – about 100,000 moles
- E. 10^{44} – number of air molecules in the entire atmosphere!

Let \bar{s} be the average speed of a particle moving in 1-dimension between endpoints x_1 and x_2 , and \bar{v} be the average velocity of the particle between x_1 and x_2 . Which statement is always true?

A. $\bar{s} \leq \bar{v}$

B. $\bar{s} = \bar{v}$

C. $\bar{s} \geq \bar{v}$

D. Not enough info given to determine the relative magnitudes.

(Note – see example 2.1 in text)