Today:
Peer-review activity
Center of Mass
Torque

Irish Phrasebook

Take it handy – Relax a bit, not get up to anything much

Announcements

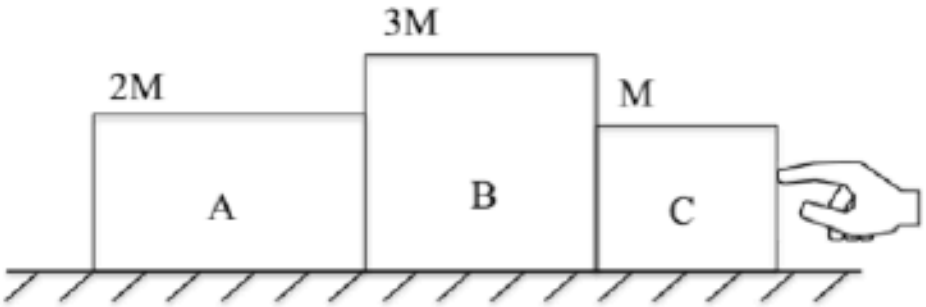
- No LON-CAPA homework this week
- Ch 3.1-3.4 on-paper homework due Friday Oct. 2nd
- Exam 1 on Monday 5th
- Reading question for Ch 4.4-4.6 Tuesday 6th

Help-room hours

- **No help-room hours tonight from 8-10pm:**
  now Sunday 1-3pm
- **Change in help-room hours on Thursday:** now 9-11am instead of 3-5pm
- Extra hour this Friday in help-room: now 3-6pm
- I have extra office hours this week – 2:30-4pm on Friday
- Review sessions today and tomorrow at 7pm in C104

Quick look at Ch2 On-paper HW

Blocks A, B, and C are being pushed across a frictionless table by a hand that exerts a constant horizontal force. Block A has mass $2M$, block B has mass $3M$, and block C has mass M.

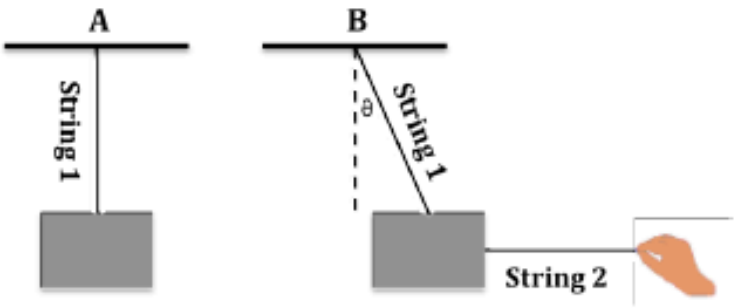


a) Draw a systems schema that represents all the objects in this interaction.

b) Draw separate free-body diagrams for each of the three blocks. Identify the Newton's 3rd Law pairs and explain why you drew the length of each arrow the way you did.

Ch 3 On-Paper HW Peer-Feedback Activity

A shows a block hanging from a string. You pull the block to the side with another string (shown in **B**).



I. Consider the following student statements about the tension in String 1 (T_1) in situations **A** and **B**:

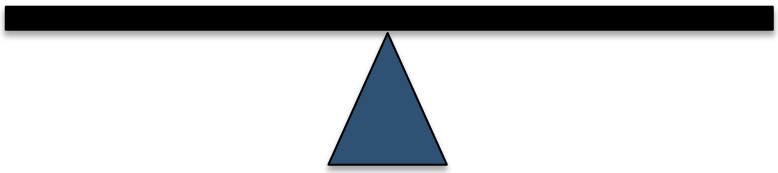
Student 1: *"The tension force due to String 2 in **B** is helping to support the block. Therefore, T_1 in **A** is greater than T_1 in **B**."*

Student 2: *"I think T_1 would be the same in **A** and **B** because the string is the same length and it's acting from the same point"*

Do you agree with either student? Explain your reasoning. (Hint: a free-body diagram will probably help you here.)

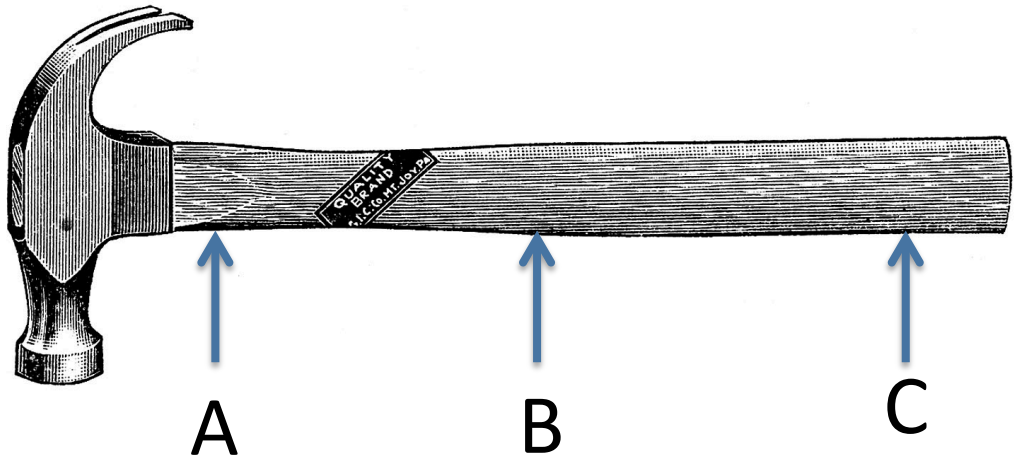
Let’s get back to torque….

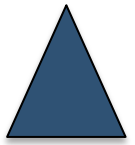
Reading Q: How do we determine the "point" object of an extended body?



The beam is stationary. What can we say about the beam and pivot system? What does that tell you about the mass of the beam?

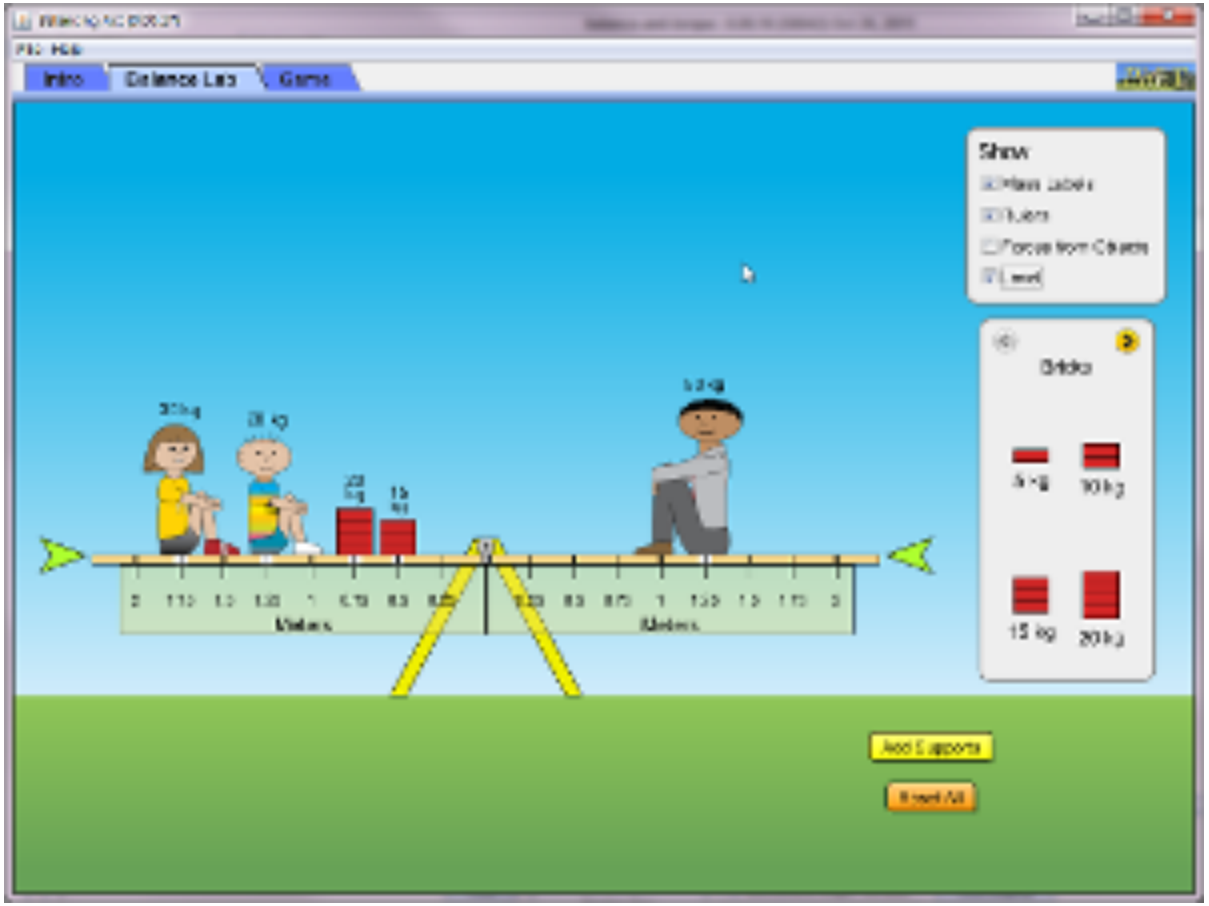
Which point is the closest to where you need to place the pivot so that the hammer can balance?





A. Point A
B. Point B
C. Point C
D. I can't tell

Investigating Balancing Conditions



http://phet.colorado.edu/en/simulation/balancing-act