Today:
Peer-feedback activity
Free-body diagrams
System Schema

Irish Phrasebook

wrecking the gaff – destroying the house, usually at a house party, *"We wrecked the gaff last night"*

Sometimes used dramatically if someone breaks or just drops something, "*You're wrecking the gaff*"

Purpose of peer-reflection

- Building solutions and constructing complete explanations is a skill you need to practice
  - In writing you sometimes have to provide extra detail to communicate understanding effectively
- Feedback will help you recognize what and where this extra detail is needed
- Reading other peoples solutions gives you access to different approaches and reasoning

Reading Solutions

- Try to understand the solution/explanation based only on what is written
  - Note gaps in logic you fill in yourself
- Is the solution justified?
  - Is there enough evidence to support claims?
- Compare the solution to your own work.
  - Did you get the same result?
  - If you used different approaches, are they consistent or do they contradict one another?

Giving feedback

- Be critical, but kind
  - You're job is to help each other improve your work
- Ask questions
  - Works both ways
- Be specific
- Be constructive
- If you are both unsure about the solution, try to figure it out together

How Big is a Worm?

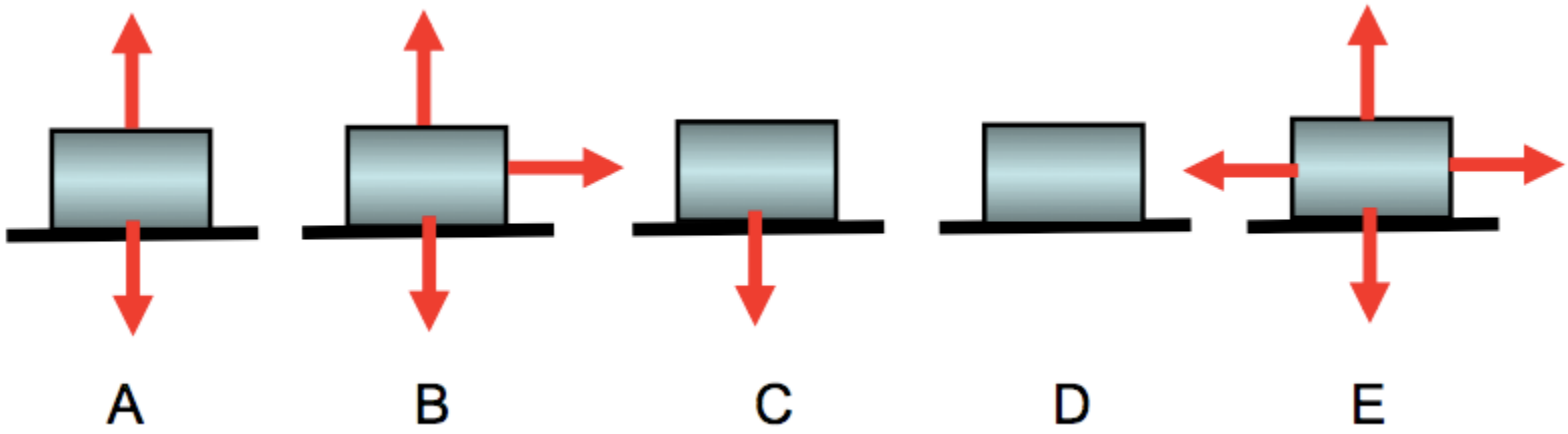
- Focusing on part D.3. – evidence required may come from other parts

- 10 mins on activity
  - Approx. 3 mins to read and interpret solutions
  - Rest on asking questions and giving feedback
  - If you are done, discuss parts E and F

Announcements

- Ch 1 on-paper homework due Monday in class
- Ch 2 LON-CAPA homework due tonight
  - Help room open from 3-5pm today
- Reading questions for Ch 3.1-3.4 due Sunday
- Ch 2 on-paper homework is uploaded to LON-CAPA and is linked to the course calendar (due Mon. Sept. 28th)

Now, the same block moves with a <u>constant velocity to the right</u> on the **frictionless** surface. Which of the following most closely resembles the correct free-body diagram for all forces acting on the block?



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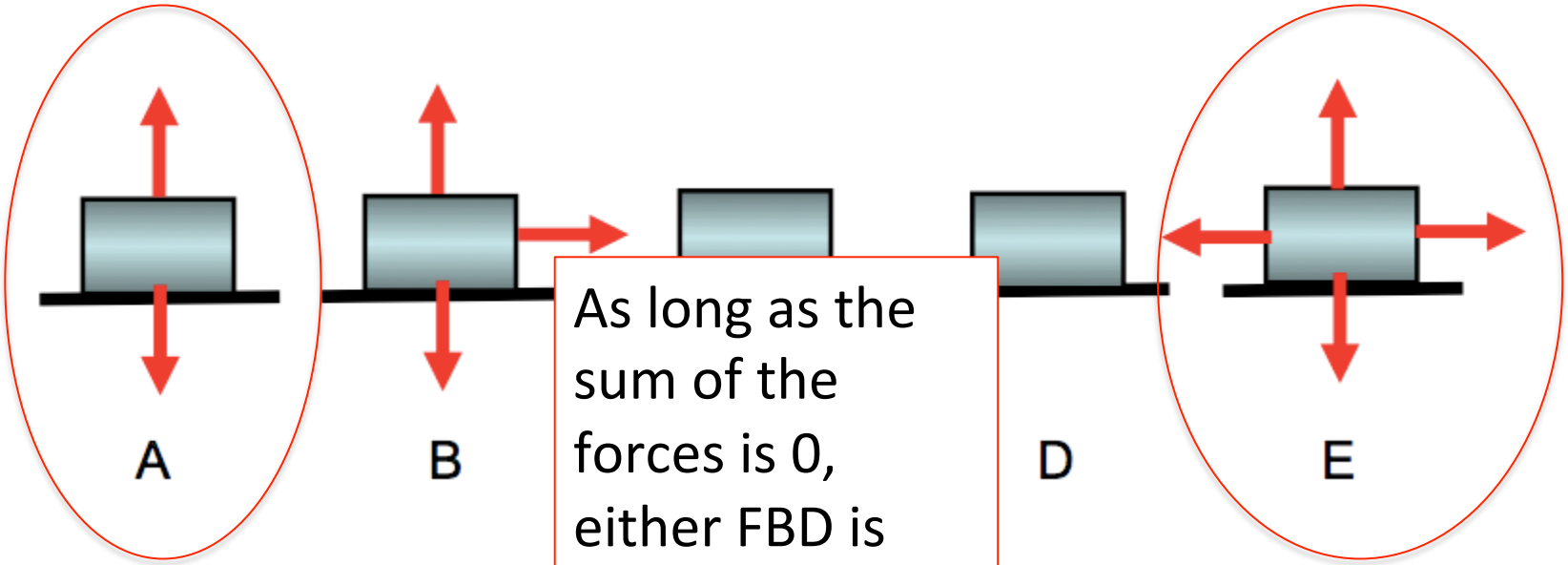
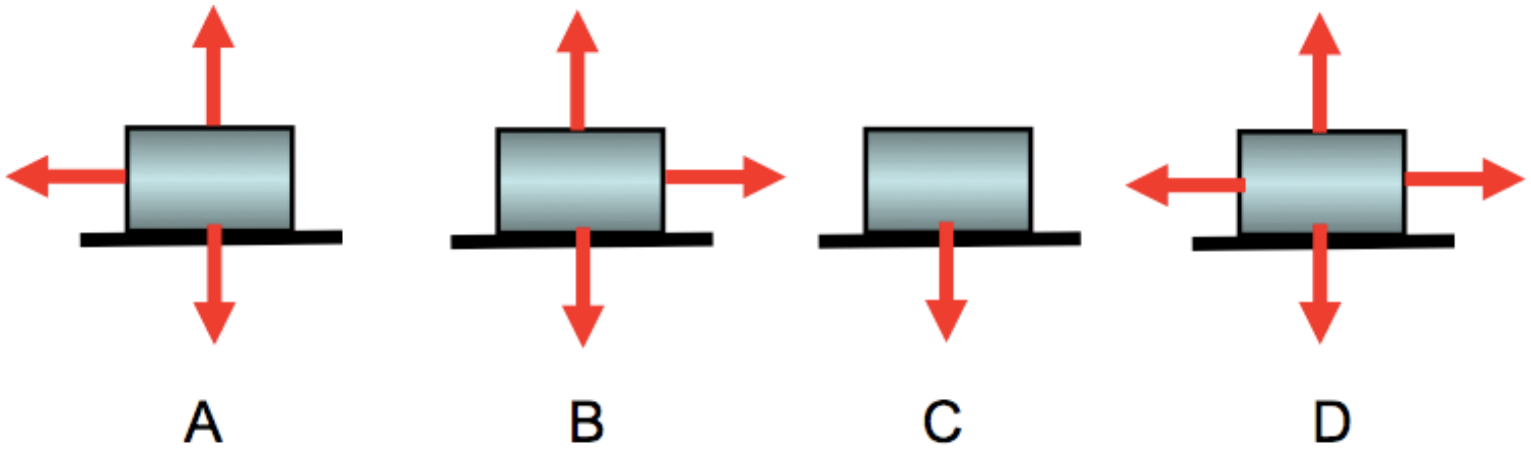
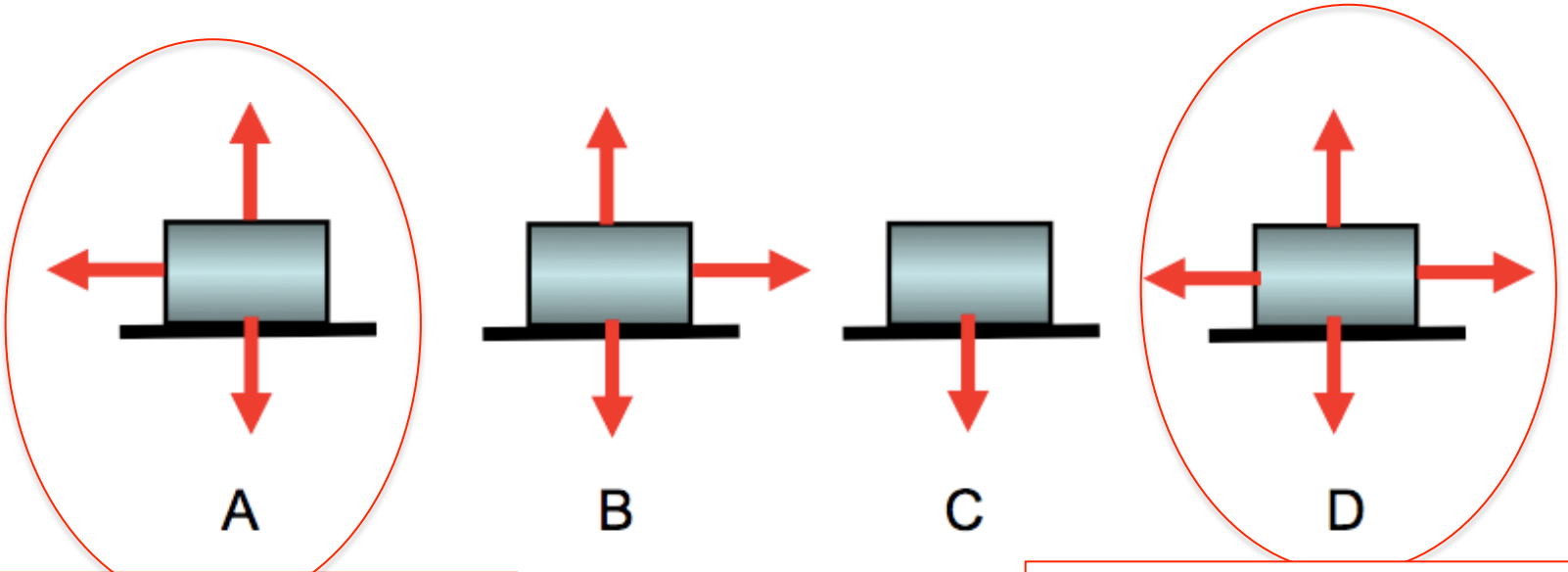


As long as the sum of the forces is 0, either FBD is correct

Now, the block moves <u>to the right</u> on a surface **<u>that has friction</u>**. Which of the following most closely resembles the correct free-body diagram for all forces acting on the block?



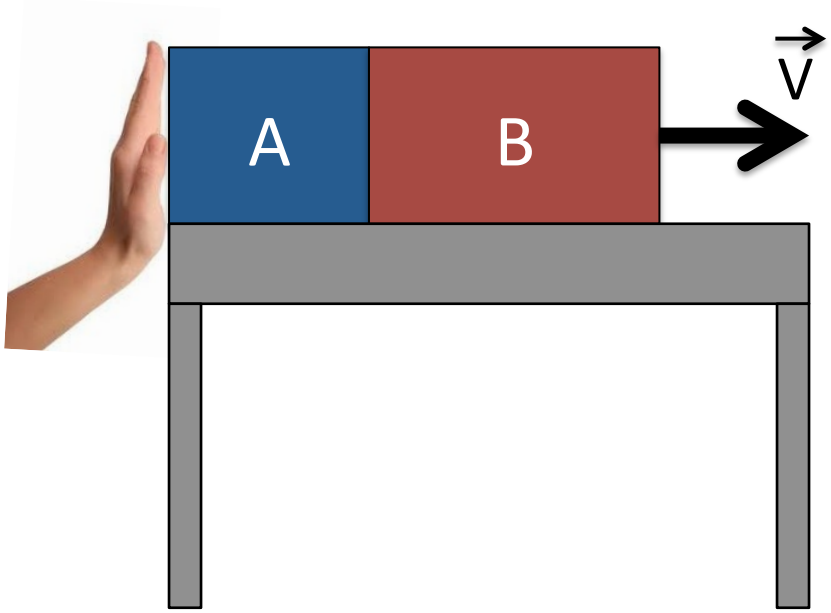
Now, the block moves <u>to the right</u> on a surface **<u>that has friction</u>**. Which of the following most closely resembles the correct free-body diagram for all forces acting on the block?



Assuming the block is slowing down, but still moving to the right.

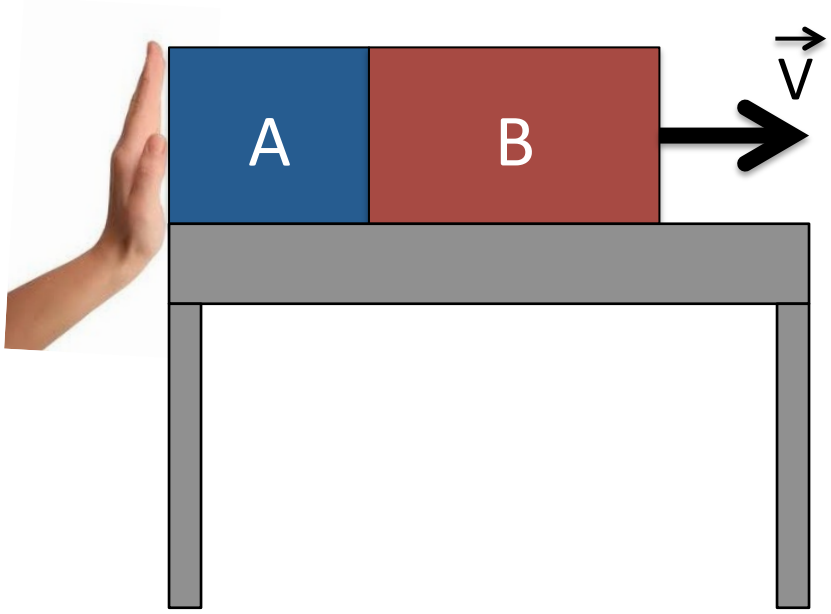
Assuming the block is moving with constant velocity

Suppose two blocks are being pushed at constant speed, which of the following is the correct free-body diagram for block B?

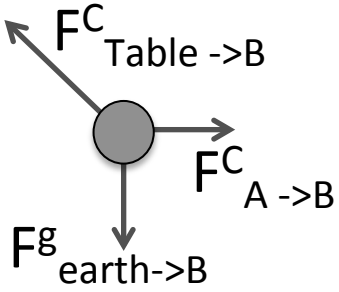


Draw it!

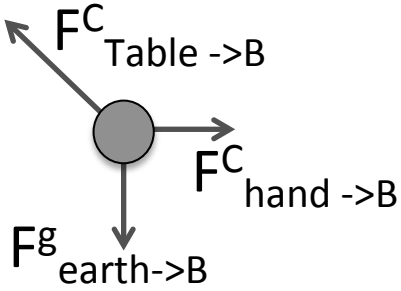
Suppose two blocks are being pushed at constant speed, which of the following is the correct free-body diagram for block B?



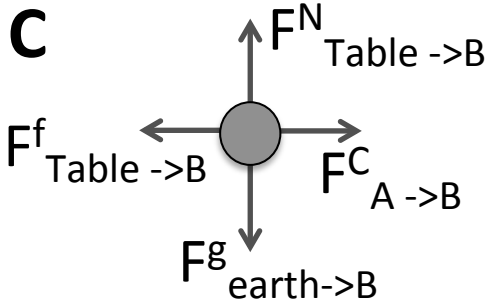
A



B

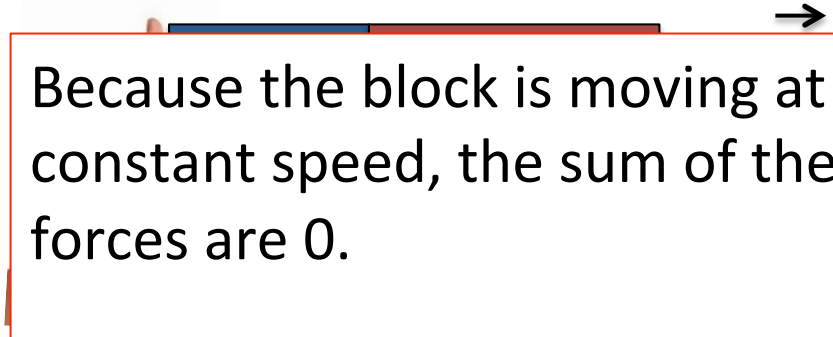


C



D None of these

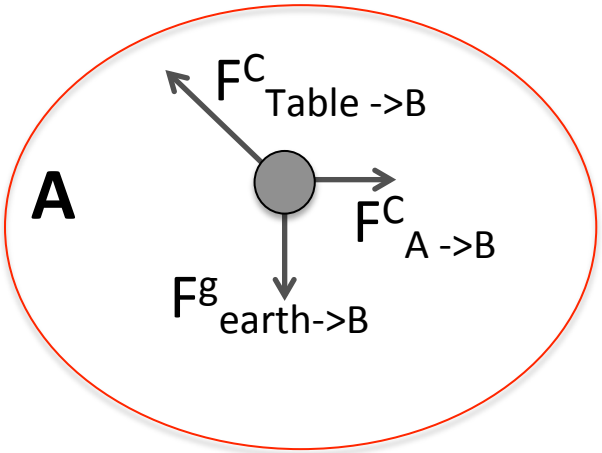
Suppose two blocks are being pushed at constant speed, which of the following is the correct free-body diagram for block B?



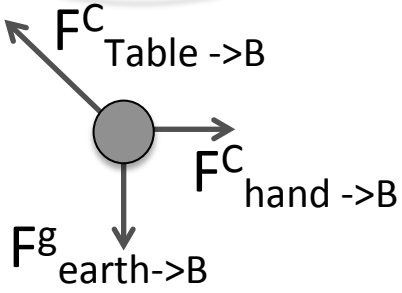
Because the block is moving at a constant speed, the sum of the forces are 0.

Both A and C show net force of 0, where A is just the two table->B forces combined.

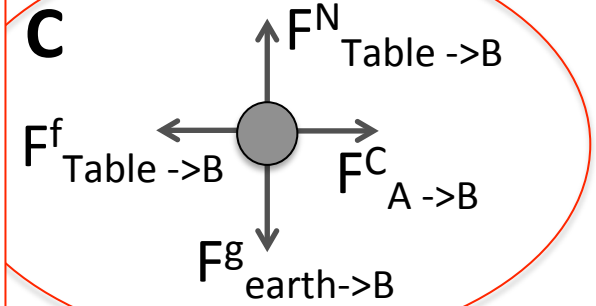
A



B

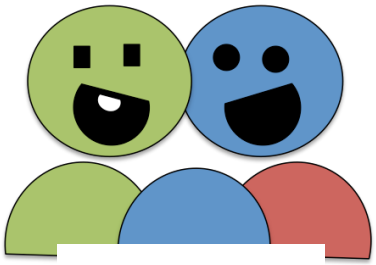


C



D None of these

- Consider dog 2 in the two-dog tug-of-war. He isn't moving. Why not?
- Draw a free body diagram that shows why he isn't moving.



Reading Q: How do I know how many forces to put in my free-body diagram?