

From the reading questions

- In the example of a hand pushing box A touching box B, we only know that the normal force from box B and the friction force from the table that push us to the left balances the force of the hand pushing us to the right, since our velocity is not changing (from 0). However, what would happen if the force of the hand pushing Box A to the right was less than the normal force from box B and the friction from the table? Or is it that even when a really small force is delivered by the hand, the friction of the table and the normal force from the box will deliver an equal and opposite?

From the reading questions

- How can forces between two objects always be equal and opposite? If that were true, we would never have any change in velocity!

How many pForces are there acting on a box pulled along the floor and moving at a constant speed?

1. 1
2. 2
3. 3
4. 4
5. more
6. 0



A block is sitting on a table
and is at rest.

What forces act on the block?



A normal force, N

A tension force, T

A friction force, f

A weight, W

1. Only W
2. Only N
3. Only T
4. Only f
5. No forces
6. N and W
7. N , W , and f
8. W and f
9. N and f

What reasoning did you use to
make your decision?

A ball is falling off a table
and has not yet hit the ground.
What forces act on the ball?



A normal force, N
A tension force, T
A friction force, f
A weight, W

1. Only W
2. Only N
3. Only T
4. Only f
5. No forces
6. N and W
7. N , W , and f
8. W and f
9. N and f

What reasoning did you use to
make your decision?

A block is sitting on a table and is being pulled at a constant velocity. What forces act on the block?



A normal force, N

A tension force, T

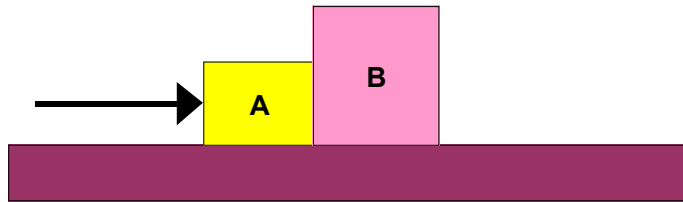
A friction force, f

A weight, W

1. Only W
2. Only N
3. Only T
4. Only f
5. No forces
6. N and W
7. N , W , and f
8. W and f
9. N and f

What reasoning did you use to
make your decision?

The two blocks exert forces on each other. Which is bigger?

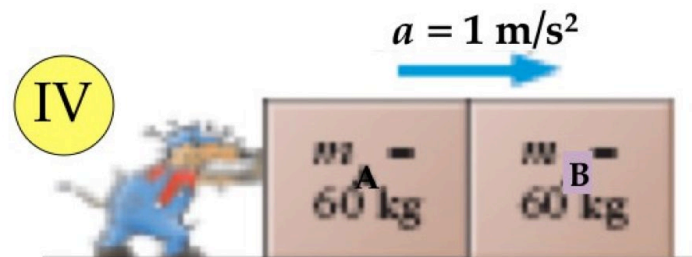
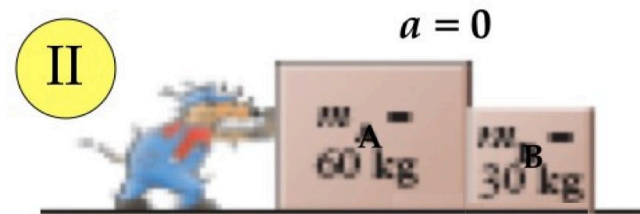
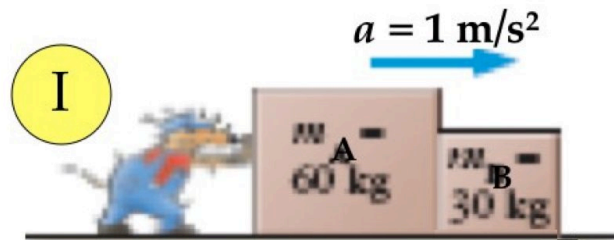


1. A exerts a greater force on B than B does on A.
2. B exerts a greater force on A than A does on B.
3. They are the same
4. You can't tell from the information given
5. I have no clue how to tell.



In the situations below, a mover pushes two crates on a horizontal surface, and they move together with a constant a . In which situations are the forces that the two crates exert on each other equal in magnitude?

- a. Situation I only.
- b. Situation II only.
- c. Situation III only.
- d. Situation IV only.
- e. In two or more of the situations.
- f. In all of the situations.
- g. You can't tell from what's given.



The mover is pushing two crates along a frictionless horizontal surface and the crates are slowly increasing their speed. Consider the following four forces:

- F_1 -- the force that the mover exerts on crate A
- F_2 -- the force that crate B exerts on crate A
- F_3 -- the force that crate A exerts on crate B
- F_4 -- the force that crate A exerts on the mover



Which of the following correctly compares the magnitudes of these forces?

- a.* $F_1 = F_2 = F_3 = F_4$
- b.* $F_1 = F_2 = F_3 > F_4$
- c.* $F_1 = F_4 > F_2 = F_3$
- d.* $F_1 > F_3 > F_2 > F_4$
- e.* None of the above.

