

Make up your own!

Name: _____

Draw a diagram for each one; choose different numbers than the people sitting near you. Show all work!

Make up a problem where there is only one force and the rate of speed up is 3 m/s every second.

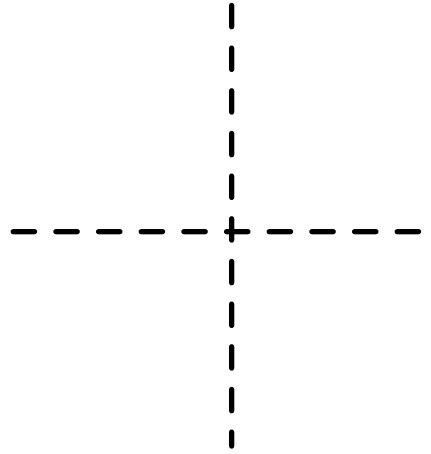
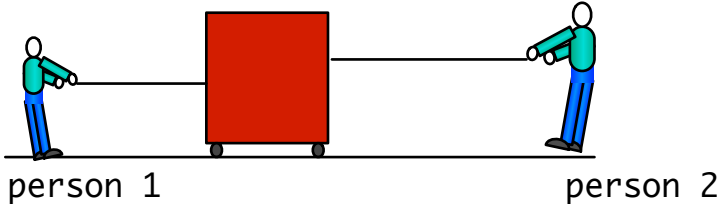
Make up a problem where there are two forces in the same direction and the rate of speed up is 2 m/s every second.

Make up a problem where there are two forces in opposite directions and the rate of speed up is 1 m/s every second.

For full credit, show your work!

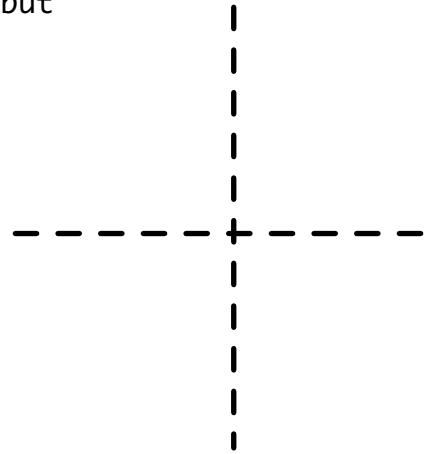
Person 1 pulls with a force of 100 N; person 2 pulls with a force of 200 N. (The box weighs 500 N.)

- Draw the forces on the diagram & label them.
- Find the Net Force.
- Find the rate of speed up if the box has 50 kg of mass.



The plane's engine provides 10,000 N of force to the right, but there is 4,000 N of drag holding it back. (The plane weighs 20,000 N and it gets 20,000 N of lift.)

- Put the forces on the diagram, and label them like the ones above.
- Find the Net Force.
- Find the rate of speed up if the plane has 2,000 kg of mass.



The car's engine provides 4,000 N of force to the right, but there is 3,000 N of drag holding it back. (The car weighs 10,000 N.)

- Put the forces on the diagram, and label them like the ones above.
- Find the Net Force.
- Find the rate of speed up if the car has 1,000 kg of mass.

