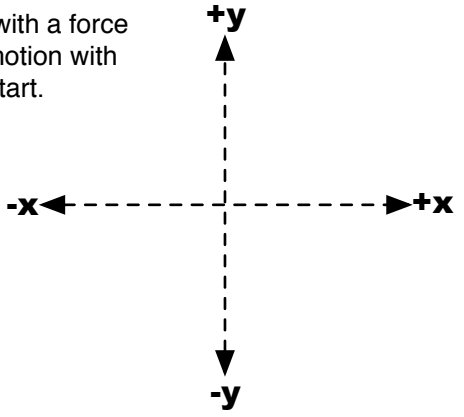
Cycle 5 - 2nd Law Check in #2

Net Force with speed change rate

The 1,000 kg car's engine pushes forward with a force of 5,000 N. Drag from the air opposes its motion with a force of 3,000 N. The car was at rest to start.

a) Calculate its speed change rate.

b) Fill in the table below.

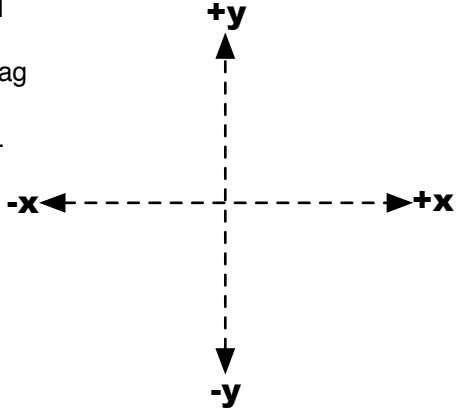


Speed at t = 0	Speed at t = 1 s	Speed at t = 2 s	Speed at t = 3 s	Speed at t = 4 s
0 m/s				

The 0.5 kg ball is thrown downward with an initial speed of 3 m/s downward. It experiences 1 N of drag opposing its motion.

a) Calculate its speed change rate.

b) Fill in the table below.



Speed at t = 0	Speed at t = 1 s	Speed at t = 2 s	Speed at t = 3 s	Speed at t = 4 s
-3 m/s				

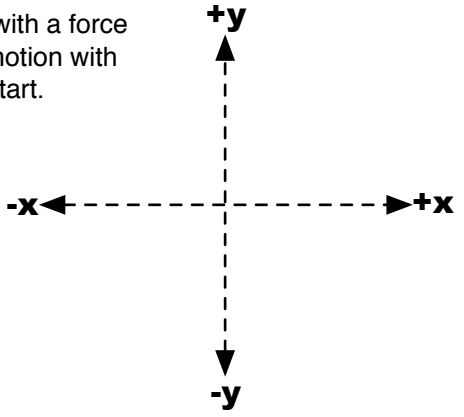
Cycle 5 - 2nd Law Check in #2

Net Force with speed change rate

The 1,000 kg car's engine pushes forward with a force of 5,000 N. Drag from the air opposes its motion with a force of 3,000 N. The car was at rest to start.

a) Calculate its speed change rate.

b) Fill in the table below.

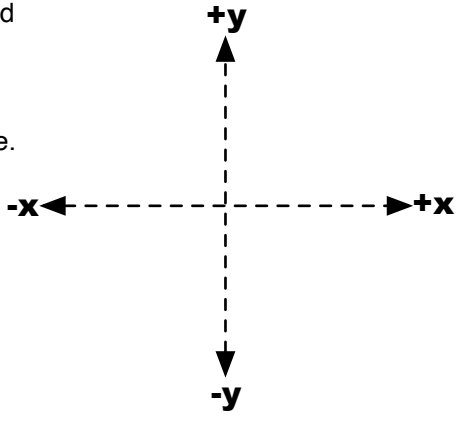


Speed at t = 0	Speed at t = 1 s	Speed at t = 2 s	Speed at t = 3 s	Speed at t = 4 s
0 m/s				

The 0.5 kg ball is thrown downward with an initial speed of 3 m/s downward. It experiences 1 N of drag opposing its motion.

a) Calculate its speed change rate.

b) Fill in the table below.



Speed at t = 0	Speed at t = 1 s	Speed at t = 2 s	Speed at t = 3 s	Speed at t = 4 s
-3 m/s				