

Homework 2,

Due on Tuesday, 05/26

Consider the motion of an object constrained to move on the x-axis ONLY. Assume RIGHTWARD is the positive direction of your x-axis. Given the signs of the TOTAL force on the object, velocity, and position of this object, describe the physical circumstances. (You may just select the correspondent answers appropriate for the blank as the example shown in the first row: for example, if the total force, velocity, and position vectors are all positive, the object is to the right of the origin, the object is moving away from the origin, and it is speeding up.)

Sign of initial position	Sign of initial velocity	Sign of total force	Physical circumstances description	Your choice	
+	+	+	The object is to the ___ of the origin. The object is moving ___ from the origin. It is _____ (speeding up/slowing down).	right toward speed up	left away slow down
-	+	+	The object is to the ___ of the origin. The object is moving ___ from the origin. It is _____ (speeding up/slowing down).	right toward speed up	left away slow down
+	-	-	The object is to the ___ of the origin. The object is moving ___ from the origin. It is _____ (speeding up/slowing down).	right toward speed up	left away slow down
-	-	-	The object is to the ___ of the origin. The object is moving ___ from the origin. It is _____ (speeding up/slowing down).	right toward speed up	left away slow down