

Inertia

- Inertia is a property of _____ to remain as they are.
 - Objects in motion stay in _____
 - Objects at rest stay at _____
- Inertia was first introduced by _____
- The _____ on an object is the combination of all forces acting on that object

Net force = _____

__ N Left __ N Right



__ N Right __ N Left

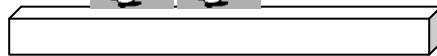
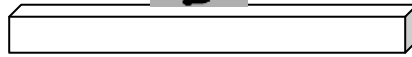


- If these forces cancel out, the net force is equal to _____. ($\Sigma F = 0$)
- _____ in motion will occur from these balanced forces.
- For each of the previous examples, _____ occurred in the object's motion.
 - The object at rest
_____.
 - The object in motion
_____.
- If the net force on an object is zero, it will continue with the
_____.



- Isabelle Inertia hangs from two rings.
- Is her motion changing?
- If Isabelle weighs 100 Newtons, what would the force of tension on each line be?

Fill in the arrows and the forces for each example. Use the given information to determine the missing force.



What type of net force will cause a change in motion? _____

Why did the ball initially begin to move? _____

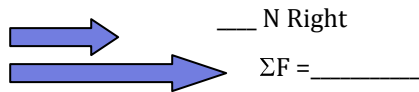
___ N Right ___ N Left



___ N Left ___ N Right



___ N Right



- Unbalanced forces cause a change in an object's _____
- A change in velocity is an _____
 - _____
 - _____
 - _____
- An object must have an _____ force acting on it in order to accelerate.