Object was at rest.

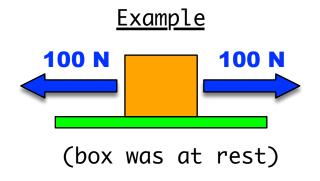
$$F_{net} \neq 0$$

Object speeds up in the direction of the Net Force.

Box speeds up to the left.

$$F_{net} = 0$$

Object remains at rest.



Box remains at rest.

Object was moving.

F_{net} with the motion

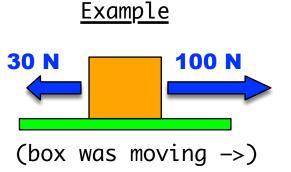
Object speeds up.

F_{net} against the motion

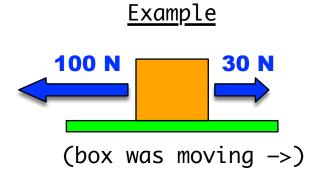
Object slows down.

 $F_{net} = 0$

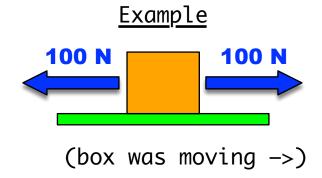
Object maintains constant speed.



Box speeds up.



Box slows down.



Box maintains constant speed.