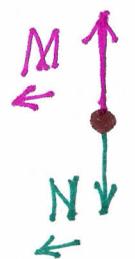


Warm Up

- A person weighing 490 N stands on a scale in an elevator.
 - What does the scale read when the elevator is at rest?
 - What is the reading on the scale when the elevator rises at constant velocity?

- $W = 490\text{ N}$
-
- a) system at rest
 - b) system moving with constant velocity



System at rest moving with constant velocity on a straight line

\Rightarrow

= Equilibrium

According to Newton's 1st Law of Motion:

$F_{NET} = 0\text{ N}$

$F_{NET} = W - N$

$\Rightarrow N = W = 490\text{ N}$

number given by the scale