

Review of Uniform Motion:

Velocity is constant

acceleration=0

Non-Uniform Motion

movement is not constant (objects speed up or slow down)

Acceleration:

If velocity increases: acceleration

If velocity decreases: deceleration

units of velocity: m/s

units of acceleration: m/s²

$$a=v/t$$

Non-Uniform Motion

Practice:

A car can go from stopped, to 30.0m/s in 5 seconds.

Calculate the average acceleration.

Non-Uniform Motion

Ted allows his bike to coast for 8.4s and finds that he slows down from 26m/s to 6.5m/s. Find his average acceleration.

Non-Uniform Motion

A bus with an initial velocity of 12m/s [N] accelerates at 0.62 m/s^2 [N] for 15s . What is the final velocity of the bus?