<u>Acceleration</u>

-defined as the rate of change of speed -calculated as the change in speed with respect to the change in time

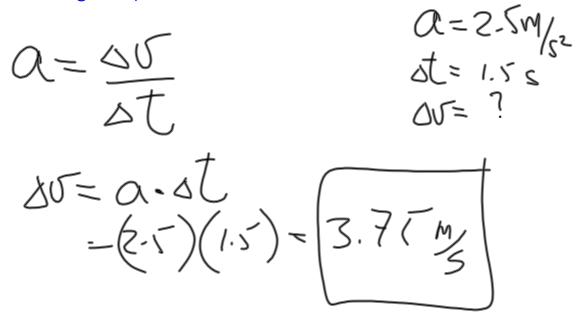
Formula



Since this equation contains several variables, it can be manipulated to solve for any one of them

Example

Myriam Bedard accelerates at an average 2.5m/s² for 1.5s. What is her change in speed at the end of 1.5s



A skateboarder rolls down a hill and changes his speed from rest to 1.9 m/s. If the average acceleration down the hill was 0.4 m/s², how long was the hill? by the dot of the second sec

For the noise how long did this
$$V_i = 0$$

 $T_i = \frac{1}{2} \frac{1$

Kerrin-Lee Gartner is moving at 1.8m/s near the top of a ski hill. 4.2s later she is travelling at 8.3m/s. What was her average acceleration? A bus with an initial speed of 12m/s accelerates at $0.62m/s^2$ for 15 s. What is the final speed of the bus?

A snowmobile reaches a top speed of 22.5 m/s after accelerating at 1.2m/s² for 17s. What was the initial speed of the snowmobile?

In a race, a car travelling at 100 km/h comes to a stop in 5.0s. What was the average acceleration?