Acceleration vs Time Plots

Gives acceleration at any time.Area gives change in velocity

Acceleration at t=4, $a(4) = -2 \text{ m/s}^2$

Change in v between t=4 and t=1. $\Delta v = +4 \text{ m/s}$

t=1-3: $\Delta v = (3m/s^2)(2s) = 6 m/s$ t=3-4: $\Delta v = (-2m/s^2)(1s) = -2 m/s$

