

5. The acceleration is defined as the change in velocity divided by the elapsed time or

$$a = \Delta v / t$$

$$a = (v_2 - v_1) / t$$

$$a = (12.0 \text{ m/s} - 25.0 \text{ m/s}) / 4.2 \text{ s}$$

$$a = -3.1 \text{ m/s}^2$$