3. Acceleration is calculated as the difference in velocity divided by the elapsed time.

$$a = \Delta v / t$$

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

$$a = (22 \text{ m/s} - 8 \text{ m/s}) / 7 \text{ s}$$

$$a = (14 \text{ m/s}) / 7 \text{ s}$$

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