

$$a = (v_2 - v_1) \div t \quad \checkmark$$

$$= v_2 \boxed{-} v_1 \boxed{=} \boxed{\div} t \boxed{=} \quad \checkmark$$

acceleration units:

$$\frac{m}{s} / s = \frac{m}{s^2}$$

(meters per second squared)

$$a = (v_2 - v_1) \div t$$

↑
Velocity
that comes
later

↑
Original,
starting
velocity

turtle going $11 \frac{m}{s}$. After 6 s, it's going $17 \frac{m}{s}$. a?

1. $v_1 = 11 \frac{m}{s}$, $t = 6s$, $v_2 = 17 \frac{m}{s}$

2. a

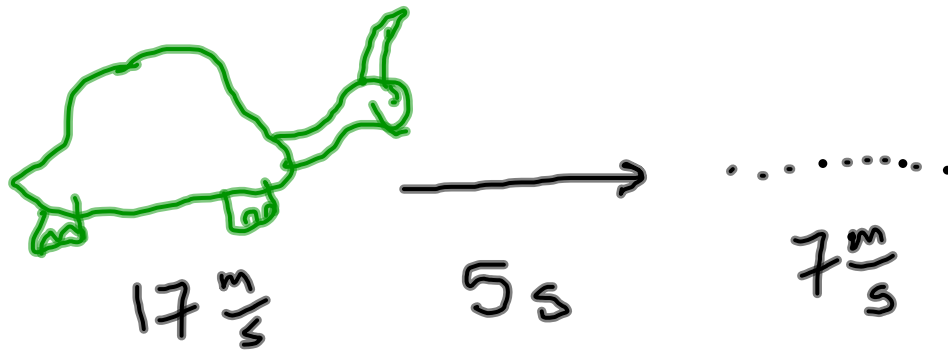
3. $a = (v_2 - v_1) \div t$

4. $a = (17 \frac{m}{s} - 11 \frac{m}{s}) \div 6s$

$= 6 \frac{m}{s} \div 6s$

$= 1$

5. $a = 1 \frac{m}{s^2}$



1. $v_1 = 17 \frac{m}{s}$, $t = 5s$, $v_2 = 7 \frac{m}{s}$

2. a

3. $a = (v_2 - v_1) \div t$

4. $a = (7 \frac{m}{s} - 17 \frac{m}{s}) \div 5s$

$$= -10 \frac{m}{s} \div 5s$$

$$= -2$$

5. $a = -2 \frac{m}{s^2}$