A rat runs at 7.2 m/s. It accelerates at 4.2 m/s² for 11.5 s. Final velocity?

① 1. $v_0 = 7.2 \frac{m}{s}$ $a = 4.2 \frac{m}{s^2}$ $t = 11.5s$

2. v

3. $v = v_0 + (a \cdot t)$

4. $v = 7.2 + (4.2 \cdot 11.5)$

$v = 55.5$

5. $\boxed{v = 55.5 \frac{m}{s} \ N}$

$$a = \frac{(v - v_0)}{t} = \frac{10 - 2}{4} = \frac{8}{4} = 2 \, \text{m/s}^2$$

$v = 10 \, \text{m/s}$

$v_0 = 2 \, \text{m/s}$

$t = 4 \, s$

$10 \boxed{} 2 \boxed{} 4 =$

$10 - 0.5 = 9.5$

$10 \boxed{} 2 \boxed{} \boxed{} 4 = 2 \checkmark$

$\rightarrow$ Always use/show 5 steps!