The Five Steps:

1a) List the variables, #'s in the problem

1b) Write the variable you're trying to find

2) Write the formula

3) Substitute

4) Solve, show work —

WRITE ANSWER W/UNITS + DIR.

5) Check your work – solve the equation for a different variable ✓

TODAY: You only need 1 equation

$$\text{velocity} = \frac{\text{displacement}}{\text{time}}$$

2 → $v = \frac{d}{t}$ Variables: v, d, t (1a, 1b)

Bunny hops at 1.7 m/s "along". It hops for 14.3 m. How long?

1

1a $v = 1.7\ m/s$, $d = 14.3\ m$

1b t

2 $v = \frac{d}{t}$

3 $1.7 = \frac{14.3}{t}$

4 $t \cdot 1.7 = \frac{14.3}{t} \cdot t$

$\frac{1.7t}{1.7} = \frac{14.3}{1.7}$

$\boxed{t = 8.41\ s}$

5 $v = \frac{d}{t}$

$v = \frac{14.3}{8.41}$

$v = 1.70$ ✓

#1 (Velocity Problems)

1a $d = 11\ m \quad t = 63\ sec$

1b $v = ?$

2 $v = \frac{d}{t}$

3 $v = \frac{11}{63}$

4 $v =$ **$.175\ \frac{m}{s}$ Down Trail**

5 $v = \frac{d}{t}$

$63 \times .175 = \frac{d}{63} \times (63)$

$11.025 = d$

✓