

## Velocity Problems:

1. Finish (if you need to)
2. UNITS and DIRECTION

IF no obvious direction, write your answer with a "+" or "-" sign in front

- "s" for time (seconds)
- "m" + direction for displacement (meters)
- " $\frac{m}{s}$ " + direction for velocity (meters per second)

3. On step 3 ÷ 4, use algebra to solve the equations
4. On step 5, leave one variable as a letter (not the one you were originally looking for) - and use algebra to solve the equation

4. Furry rabbit is walking to a friend's house. He walks 75 meters north, with a velocity of 2.3 meters per second. For how many seconds was he walking?

1a  $d = 75 \text{ m N}, v = 2.3 \frac{\text{m}}{\text{s}}$

1b  $t$

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

3  $2.3 = \frac{75}{t}$

4  $t \cdot 2.3 = \frac{75}{t} \cdot t$

$$\frac{2.3t}{2.3} = \frac{75}{2.3}$$

$$t = 32.61 \text{ s}$$

5  $v = \frac{d}{t}$  ← leave as a letter

$$32.61 \cdot 2.3 = \frac{d}{32.61} \cdot 32.61$$

$$d = 75.003 \text{ m N} \checkmark$$