

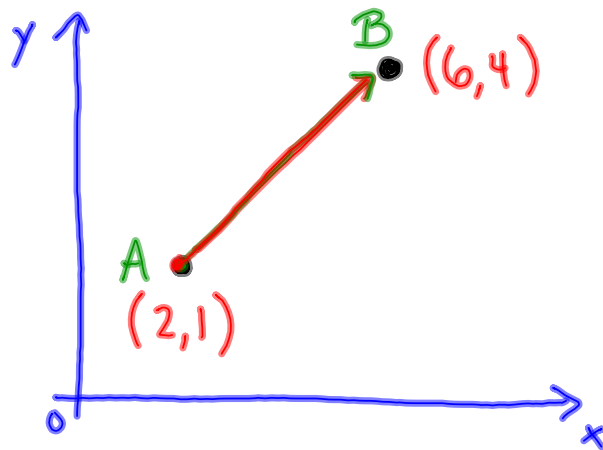
DISTANCE
SPEED
TIME

AND

THE DISTANCE BETWEEN 2 POINTS.

QUESTION:

If you walk AT
A SPEED OF
2.5 km/h,



HOW LONG WILL IT TAKE YOU TO WALK FROM
POINT A TO POINT B.

2 FORMULAS.



→ $\text{dist} = \text{speed} \cdot \text{time}.$
→ $\text{speed} = \frac{\text{dist}}{\text{time}}$
→ $\text{time} = \frac{\text{dist}}{\text{speed}}.$

$$\text{DIST}_{(1 \rightarrow 2)} = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

POINT 1 (x_1, y_1)

POINT 2 (x_2, y_2)

← IMPORTANT
TO WRITE THIS !

STEP (1) Find dist $A \rightarrow B$

WRITE FORMULA !

$$\text{dist}_{A \rightarrow B} = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$\text{dist} = \sqrt{(6-2)^2 + (4-1)^2}$$

$$= \sqrt{(4)^2 + (3)^2}$$

$$= \sqrt{16 + 9}$$

$$= \sqrt{25}$$

$$\text{dist} = 5 \text{ km.}$$

x_1, y_1

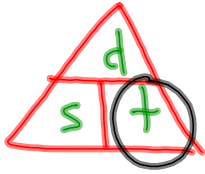
A (2, 1)

B (6, 4)

x_2, y_2

WRITE POINTS !

STEP 2: Find THE TIME.



$$\text{time} = \frac{\text{dist}}{\text{speed}} = \frac{5 \text{ km}}{2.5 \text{ km/h}} = \underline{\underline{2 \text{ hours.}}}$$

↑ UNITS SHOULD MATCH UP.

time = ?

dist = 5 km.

speed = 2.5 km/h.

FINAL ANSWER: IT WOULD TAKE 2 HOURS TO WALK FROM A TO B.