

SOLUTIONS

$$\textcircled{1} \quad 30 = \frac{\text{rise}}{6}$$

$$\text{rise} = 180$$

$$\textcircled{3} \quad 10 = \frac{\text{rise}}{3}$$

$$\text{rise} = 30$$

$$\textcircled{5} \quad \frac{5\text{m}}{1\text{min}} = \frac{10\text{m}}{2\text{min}}$$

He is 180m away

$$\textcircled{6} \quad \frac{40}{1} = \frac{160}{4}$$

$$\text{run} = 4 \text{ min}$$

Consider this **Example**:

Bryan walks from his house to his girlfriends', which is 180m away. Given the following steps he takes, draw his path (on the graph below) to and from his girlfriends house (assume he lives at 0)

1. He walks directly to his girlfriends house at a constant rate of 30m/min and it takes him 6min to get there.
2. When he gets to her house, they fight and so he only stays for 4minutes.
3. Very upset, he sulks on his way home so he only walks at a constant rate of 10m/min for 3 minutes when he **stops for a minute to think**.
4. Realizing he can't give her up without a fight, he backtracks for 10m at a slow pace (re-thinking if its a smart idea or not) of 5m/min
5. He abruptly changes his mind and walks straight home at a constant speed of 40m/min.
6. In total, how long is Bryan out for? _____

$\textcircled{4}$ stops for a min to think

GRAPH HIS PATH BELOW:

$$\textcircled{1} \quad \text{Rate Triangle \#1}$$

$$\frac{\text{rise}}{\text{run}} = \frac{180\text{m}}{6\text{min}} = \frac{30\text{m}}{1\text{min}}$$

$$\textcircled{2} \quad \text{0} = \text{at rest}$$

$$4\text{min}$$

$$\textcircled{3} \quad \frac{30\text{m}}{3\text{min}} = \frac{10\text{m}}{1\text{min}}$$

MAKE SURE TO INCLUDE THAT HE STOPS FOR 1 MINUTE

