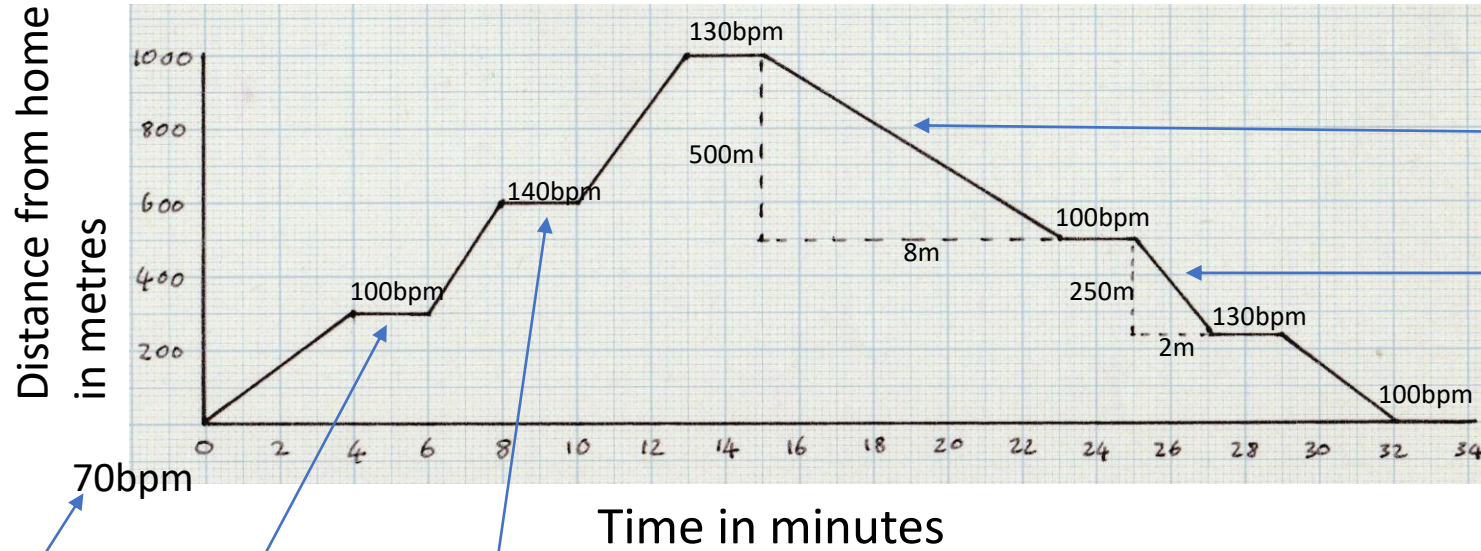


Fit Graph

Distance – time graph to show a journey with heart rate

$$\text{Gradient} = \frac{\text{change in } y}{\text{change in } x} = \frac{\Delta y}{\Delta x}$$

The steeper the gradient the faster the speed



$$\frac{500}{8} = 62.5 \text{ metres per minute} = \text{slow walk}$$

$$\frac{250}{2} = 125 \text{ metres per minute} = \text{run}$$

Resting heart rate

Walk caused heart rate to increase by 30bpm

Run caused heart rate to increase by 70bpm

How do you know if you're getting fitter?

- You'll be able to walk or run further and faster.
- When your heart is stronger, each beat can push more blood so your heart rate becomes slower but stronger.
- Always stay within your abilities and stay safe.

| Distance m | Time mins | Speed m/min | Heart Rate bpm |
|------------|-----------|-------------|----------------|
| 300 | 4 | 75 | 100 |
| 300 | 2 | 150 | 140 |
| 400 | 3 | 133 | 130 |
| 500 | 8 | 62.5 | 100 |
| 250 | 2 | 125 | 130 |
| 250 | 3 | 83.3 | 100 |