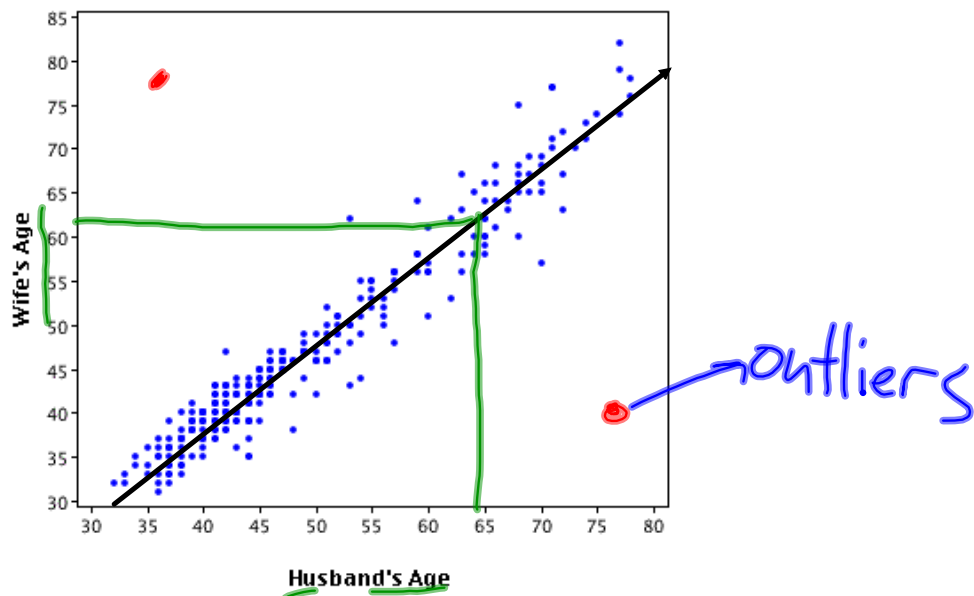


## Consolidation

### Key Points to Remember:

- An independent variable answers the question, "what can I change?"
- A dependent variable answers the question, "What do I observe?"
- Graphs (**scatter plots**) help us to recognize trends in a set of data.
- In a **positive correlation**, as one variable increases, the other variable increases.
- In a **negative correlation**, as one variable increases, the other variable decreases.
- When you **interpolate**, you estimate values **within** the graph (between two measurements in a set of data).
- When you **extrapolate**, you estimate values **beyond** the graph (outside the range of a set of data).

- a) Is this an example of a linear or non-linear relation?
- b) Are Husband's Age and Wife's Age correlated? If yes, are they positively or negatively correlated?
- c) As husband's age increases wife's age increases.



- d) Predict the age of the wife of a 65 year old man.  
62 years old  
(Interpolation)

## What's Going On?

**Checking In**

TEST

**Minds on**

Going for a run.

**Action!**

Math of Motion

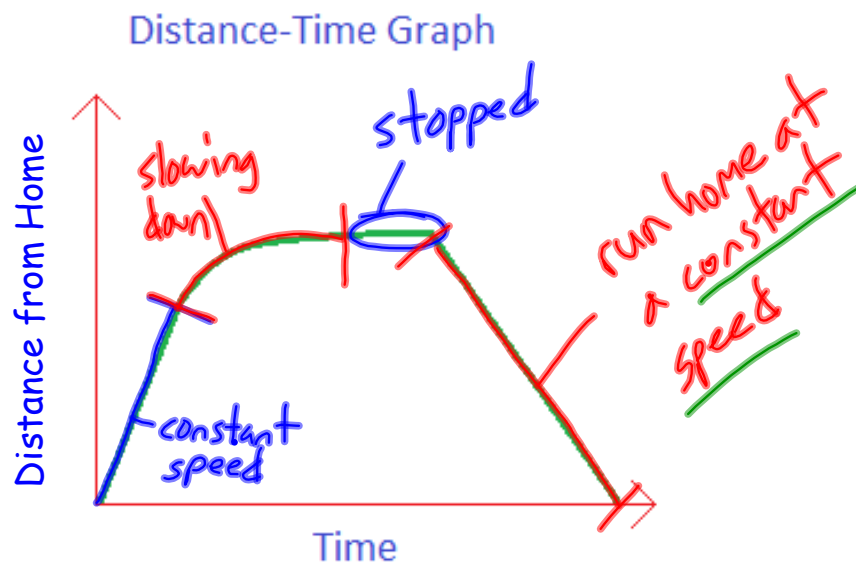
**Consolidation**

Sunday Driver

**Learning Goal - I will be able to describe and create distance-time graphs.**

## Minds on

### Going for a Run

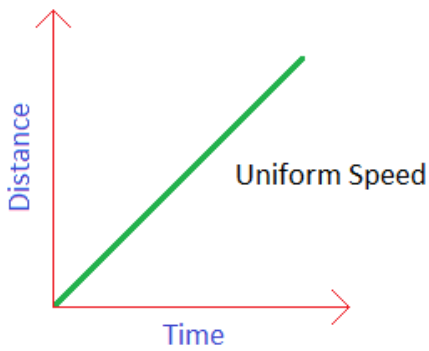


Describe what is happening in this distance-time graph.

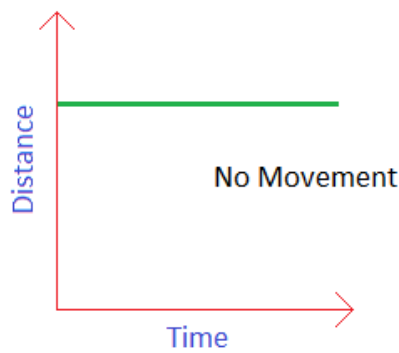
**Action!**

Math of Motion

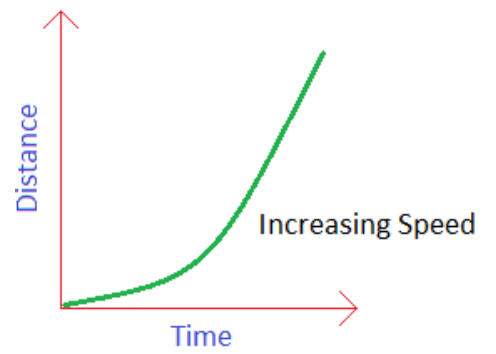
Distance-Time Graph



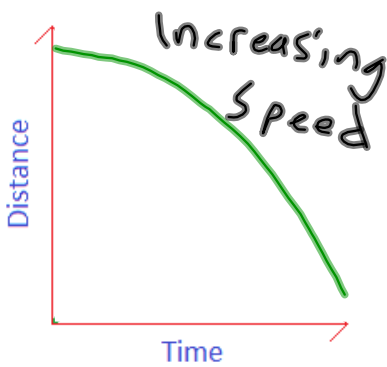
Distance-Time Graph



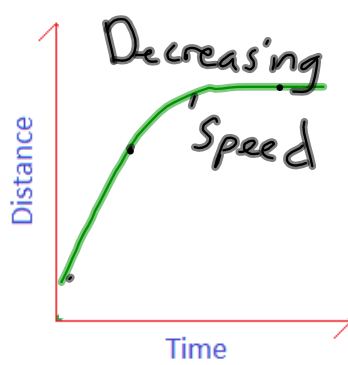
Distance-Time Graph



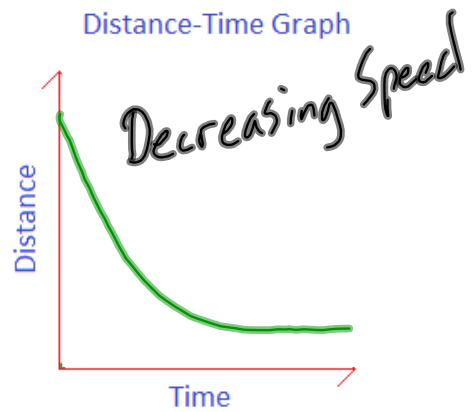
Distance-Time Graph



Distance-Time Graph



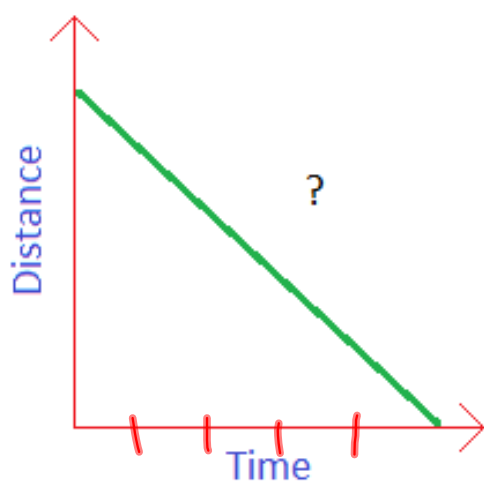
Distance-Time Graph



**Action!**

## Math of Motion

Distance-Time Graph



a) Decreasing speed

b) Uniform speed

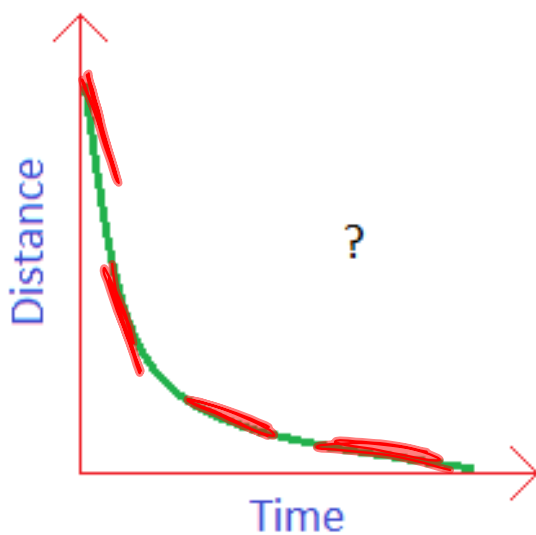
c) No movement

d) Increasing Speed

**Action!**

## Math of Motion

Distance-Time Graph



a) Decreasing speed

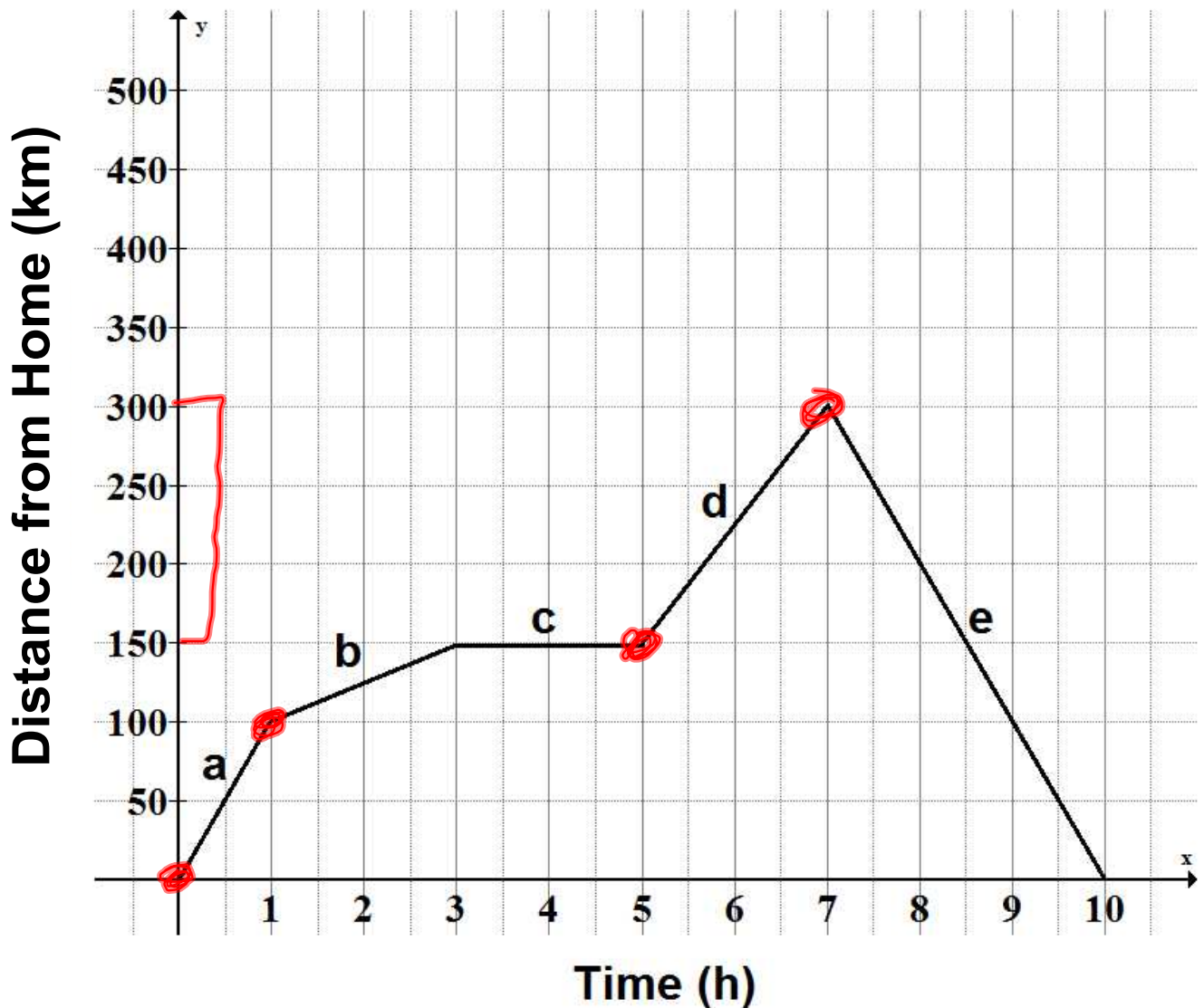
b) Uniform speed

c) No movement

d) Increasing Speed

## Consolidation

## Sunday Driver



Describe each section of the drive, be sure to include information about distance, time, speed and direction.



a) In section a they drove 100 km in 1 hour away from home.. Their speed was 100 km/h

b) In section b they drove 50 km in 2 hours away from home. Their speed was 25 km/h

$$\frac{50 \text{ km}}{2 \text{ h}} \quad 25 \text{ km/h}$$

c) In section c they stopped for 2 hours.

d) In section d they drove 150 km in 2 hours away from home. Their speed was 75 km/h.

e) In section e they drove 300 km in 3 hours towards home. Their speed was 100 km/h.

**Consolidation**

Homework!!!

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