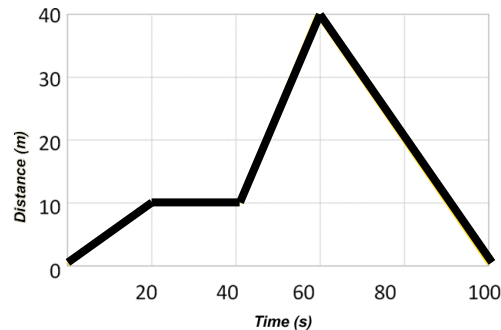


## Physics Science 1206 Worksheet 6: Distance, speed and time

Create a story that would explain this scenario Don't forget what we've learned about displacement!

1. A) Describe this graph for displacement.



1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_  
\_\_\_\_\_

### Questions for the graph:

b) What is the speed during the first 20 seconds?	e) What is the speed during the last 40 seconds?
c) What is the speed during between 40 to 60 seconds?	f) When was the object travelling the fastest? _____
d) How far is the object from the start after 60 seconds? _____	

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

**Calculation Hint: Make sure everything is in the right units.**

1. A football field is about 100 m long. If it takes a person 20 seconds to run its length, how fast (what speed) were they running?

2. The pitcher's mound in baseball is 85 m from the plate. It takes 4 seconds for a pitch to reach the plate. How fast is the pitch?
  
3. If you drive at 100 km/hr for 6 hours, how far (distance) will you go?
  
4. If you run at 12 m/s for 15 minutes, how far will you go?
  
5. Paul drives to Michigan. It is 3900 km to get there. If he averages 100 km/hr, how much time will he spend driving?
  
6. A bullet travels at 850 m/s. How long will it take a bullet to go 1 km?
  
7. A flight takes 5 hours. The destination is 4000 km from the origin. What is the planes average speed?
  
8. The fastest train in the world moves at 500 km/hr. How far will it go in 3 hours?
  
9. How long will it take light moving at 300,000 km/s to reach us from the sun? The sun is 15,000,000 km from earth.
  
10. It is 21,000 km around the earth and the earth rotates in 24 hrs. How fast is it rotating?