

Average Speed Analysis Questions

Use the [Physics Formula Sheet](#) and [Formula Circles Notes](#) for help!

1. Calculate the **average speed** of:

a. A pitcher throwing a baseball 60 meters in 0.7 seconds.

Want	Given	Equation	Solve +Units

b. A car traveling 84 miles in 1 hour.

Want	Given	Equation	Solve +Units

c. A sprinter running 1 mile in 7 minutes.

Want	Given	Equation	Solve +Units

2. How would you go about measuring the speed of a baseball? What measurements would you have to take? What calculations would you have to perform?

Type response here

3. Speed can be modeled with a strobe photo, an equation, or a graph. How can all three models represent a car moving at 20 m/s?

Type response here

4. A driver travels at 350 ft/s for 20 s. How far has the driver traveled (*use a formula circle to help you answer*)?

Want	Given	Equation	Solve +Units

5. A track star runs the 100 meter race at a speed of 10 m/s. How much time did it take to run the 100 m (*use a formula circle to help you answer*)?

Want	Given	Equation	Solve +Units

6. Do you know how fast the track star was going when they passed the 10 meter mark?
Explain your answer.

Type response here

7. In which diagram is the car traveling the slowest?
Explain how you made your choice.

Type response here



8. In which diagram is the car traveling the fastest?
Explain how you made your choice.

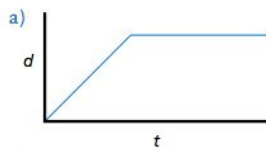
Type response here



9. Is each car traveling at a **constant speed**? How can you tell?

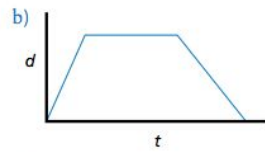
Type response here

10. For each distance vs. time graph, tell a story about an object that could have moved in this way.



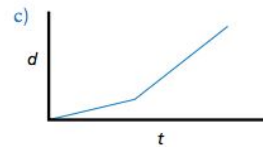
a.

Type response here



b.

Type response here



c.

Type response here