Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd: 3 **Week 5** Distance Learning

**MOTION**

***Use the resources on Mr. Hanna’s website to complete the following assignment.***

**VOCABULARY:**

1. REFERENCE POINT –
2. SPEED –
3. VELOCITY –
4. ACCELERATION –
5. SLOPE –

**SHORT ANSWER:**

1. How can you tell if an object is moving?
2. How is a “scalar” different from a “vector”? Which of these would characterize speed? Which would characterize velocity?
3. List three ways an object can accelerate (3 ways to change velocity).
4. When you’re calculating acceleration and get a negative number, what does that tell you?
5. What can you learn by calculating the slope of a line on a distance vs. time graph? How do you calculate slope?

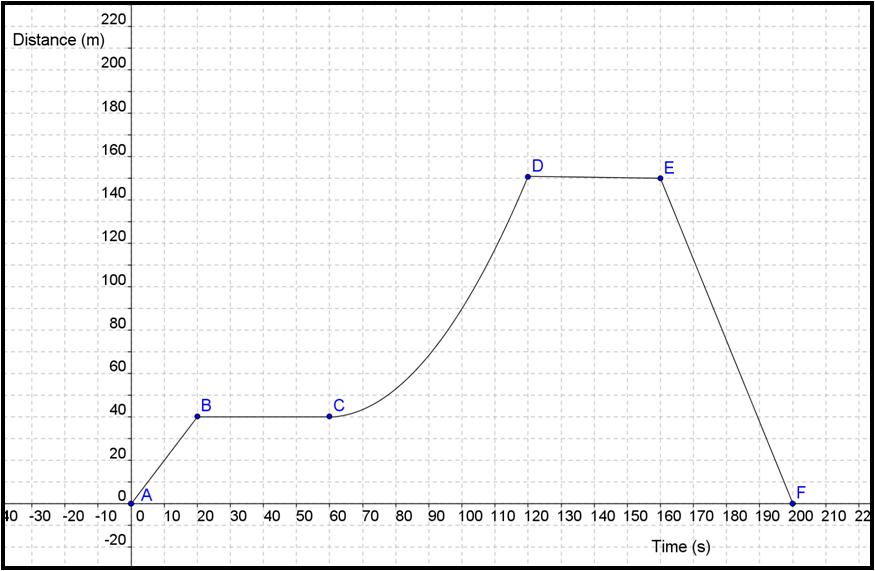
**PRACTICE PROBLEMS: (*remember to show your work – 3 steps!*)**

1. How fast is a turtle moving if it crawls 1.5 m in 60 s?
2. What is the velocity of a car if it takes 5 s for it to drive 55 m?
3. What is the acceleration of a golf cart if it takes 4 s for it to speed up from 0 m/s to 10 m/s?

**INTERPRETING GRAPHS:**

1. What does a straight line with a positive slope mean on a displacement vs time graph? What does a straight, negative slope mean?
2. What does a curved line mean on a displacement vs time graph?

***Use the graph below to answer the following questions.***



1. Describe the motion of the object that resulted in the graph above. (*What did the object do to create this data?*)
2. Identify at least two places on this graph where the object accelerated.
3. How fast is the object moving between points A and B?
4. How fast is the object moving between points B and C?
5. Compare the motion of the object between A and B to the motion of the object between E and F.