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:

6) How can you tell if an object is moving?

7) How is a "scalar" different from a "vector"? Which of these would characterize speed? Which would characterize velocity?

8) List three ways an object can accelerate (3 ways to change velocity).

9) When you're calculating acceleration and get a negative number, what does that tell you?

10) 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!*)

11) How fast is a turtle moving if it crawls 1.5 m in 60 s?

12) What is the velocity of a car if it takes 5 s for it to drive 55 m?

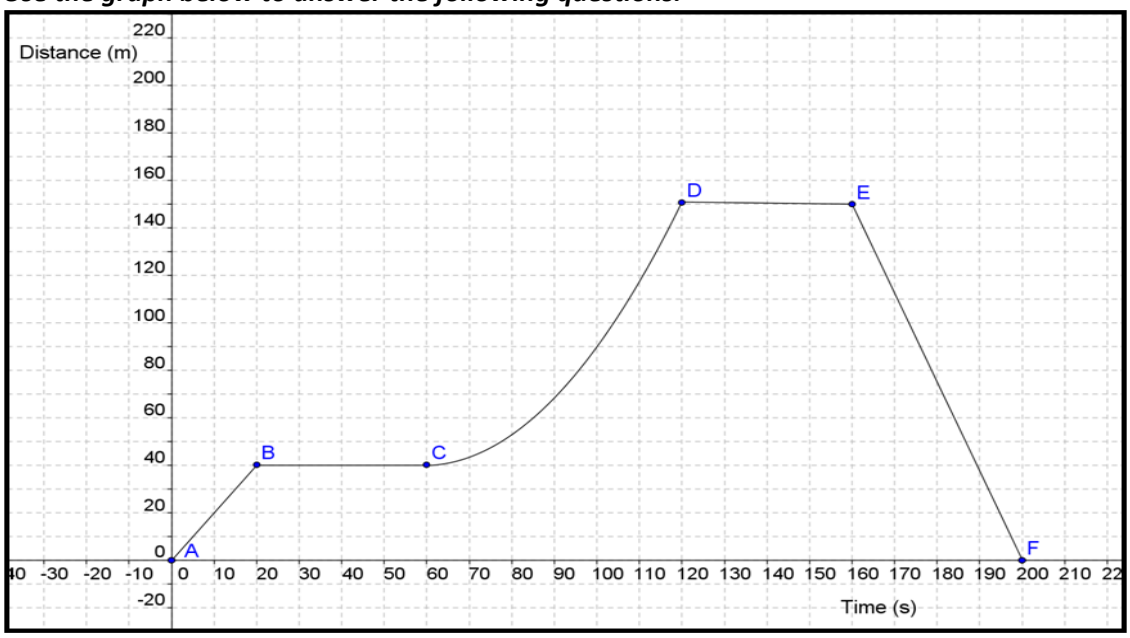
13) What is the acceleration of a golf cart if it takes 4 s for it to speed up from 0 m/s to 10 m/s?

INTERPRETING GRAPHS:

14) What does a straight line with a positive slope mean on a displacement vs time graph? What does a straight, negative slope mean?

15) What does a curved line mean on a displacement vs time graph?

Use the graph below to answer the following questions.



16) Describe the motion of the object that resulted in the graph above. (*What did the object do to create this data?*)

17) Identify at least two places on this graph where the object accelerated.

18) How fast is the object moving between points A and B?

19) How fast is the object moving between points B and C?

20) Compare the motion of the object between A and B to the motion of the object between E and F.