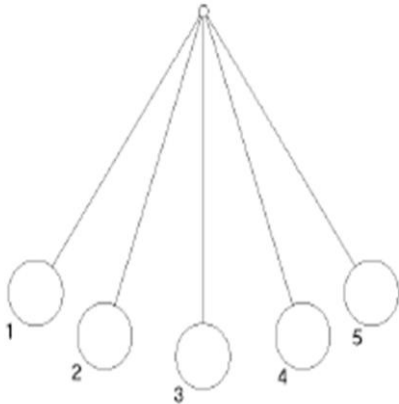


Name _____

Date _____ Period/Teacher _____



1. At which point does the pendulum have the greatest kinetic energy?



- A. Point 1
- B. Point 4
- C. Point 3
- D. Point 2

6.8A

2. VOCABULARY – Match the following terms to the correct definitions.

_____ A push or a pull that change the motion of an object

_____ A change in an object's position, direction or location

_____ A force that change's an object's motion, direction, or speed

_____ The measurement of the rate of change of position with respect to time

_____ The overall speed at which an object moves

- A. Motion B. Speed C. Average Speed
- D. Unbalanced Force E. Force

6.8B,C

3. Two forces are acting on an object: one force of 50 newtons to the east, the other a force of 30 newtons to the west.

Draw a picture demonstrating the forces on the object:

Calculate the net force acting on the object:

Which correctly identifies the direction the object will go?

- A. accelerate to the east.
- B. accelerate to the west.

6.8B

4. A group of students design an investigation to test how the temperature of soil affects the rate at which bean seeds sprout. One student is given the task of observing and recording the results of the investigation. The results will be MOST reliable if the student makes the observations in which way?

- A. once per day
- B. when it's convenient
- C. whenever a new sprout appears
- D. at about the same time every day

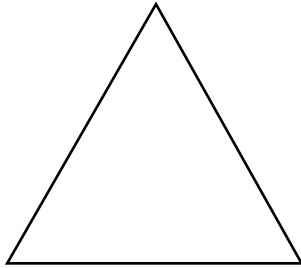
6.2B

5. VOCABULARY – Define speed and the draw the speed triangle.

Speed –

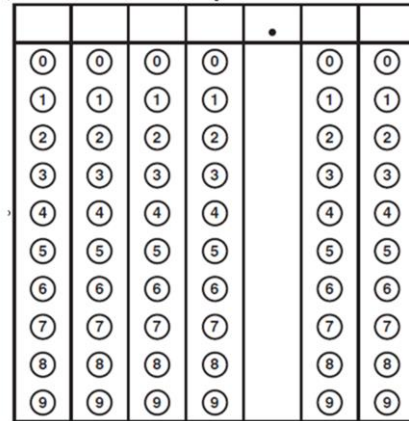
Speed Formula –

Speed Triangle –



6.8C

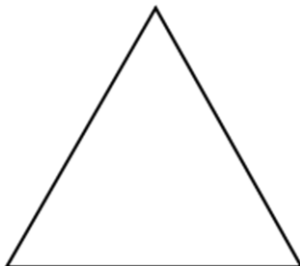
6. The runner completed a 100-meter race with a time of 13.75 seconds. What was her average speed? (Round to the nearest tenth)



6.8C

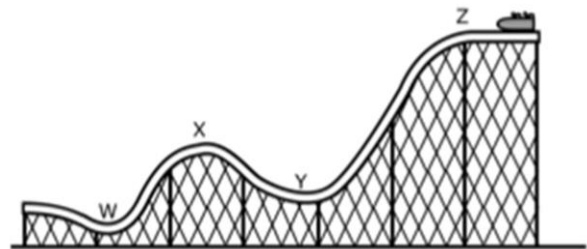
7. A penguin swimming underwater goes 20 meters in 8 seconds. What is its average speed?

- A. 0.4 m/s
- B. 2.5 s/m
- C. 160 m/s
- D. 2.5 m/s



6.8C

8. The illustration shows a rollercoaster and indicates four different positions the car might be at as it moves along the track. At which point in the rollercoaster's journey is its potential energy the greatest?



- A. W
- B. X
- C. Y
- D. Z

6.8A