

VELOCITY & Position vs. Time GRAPH PRACTICE

Name _____

Date _____ Block _____

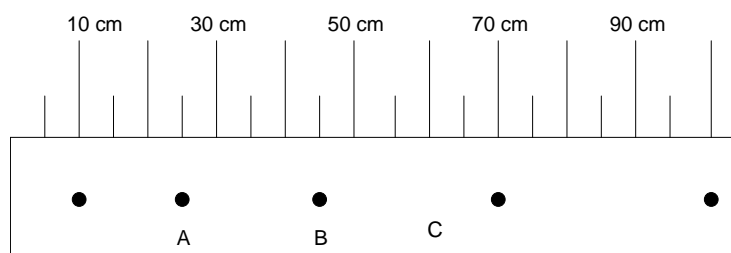
Round answers to the nearest hundredth
Show ALL work
NO NAKED numbers

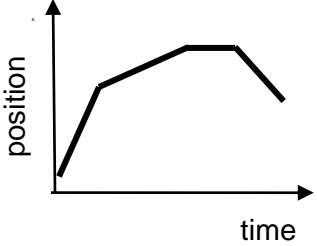
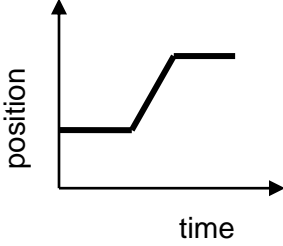
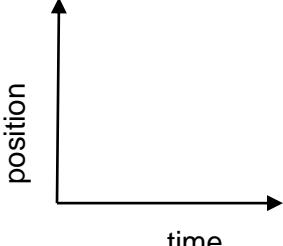
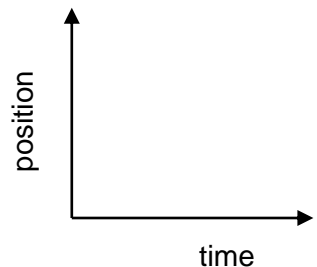
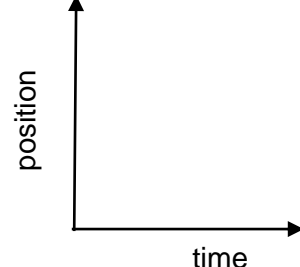
1. Nascar driver, Jeff Gordon, has a car that is one of the fastest on the circuit. If it travels 965.6 km in 4 hours, what is his cruising velocity?
2. Because of sea floor spreading, the Atlantic Ocean is getting wider at a rate of about three cm/year. At that rate of expansion, how much wider will the Atlantic be at the end of 59 years?
3. How long would it take you to swim across a lake that is 900 meters across if you swim at 1.5 m/sec?
4. If Justin races his Chevy S-10 down Highway 37 for 2560 meters in 60 seconds, what is his velocity?
5. After morning science class you hop in your car and drive at a constant velocity to Hamburg. It takes you 30 minutes to get there, and your odometer in your car shows you traveled 36 km. After an hour of shopping, you get back in your car and drive back to Tates Creek to get to B4. The journey back takes you 38 minutes because you stop for 6 min at Taco Bell to buy a mexi-melt.
 - a) What was your velocity driving to Hamburg?
6. In a 4.0-kilometer race, a runner completes the first kilometer in 5.9 minutes, the second kilometer in 6.2 minutes, the third kilometer in 6.3 minutes, and the final kilometer in 6.0 minutes. What is the average speed of the runner for the race?

$$\text{Average Speed} = \frac{\text{Total distance traveled}}{\text{Time Interval}}$$

7. Circle your answer(s). A bicycle rider would **NOT** be accelerating if her:
 - direction and speed were unchanged.
 - direction changed and speed was constant.
 - speed increased and direction was unchanged.
 - speed decreased.

8. A motion map to the right shows the specific distance of the dots. A dot was made every 2 seconds. What is the average speed of the object between A and C?



	Position vs. Time	Written Description
#1		
#2		
#3		<p>Sketch 2 lines that represent the same speed but different starting positions.</p>
#4		<p>Matt's pulling up to a red light on his way home (negative direction).</p>
#5		<p>Morgan speeds up on her bike to catch up with Sarah. The girls are on their way to the store (+ direction).</p>