

Work Sheets following Lesson 4 and lesson 5

/20

Assignment 2**Displacement, Velocity**

1. For each of the variables, find the missing information and fill in the blank spaces in the table. Use a “+” sign to indicate forward movement and a “-” sign to indicate backwards movement. (5)

Velocity of an Object in Motion		
Change in position (cm)	Change in time (s)	Velocity (cm/s)
+ 40 cm	5 s	
+ 25 cm	10 s	
	10 s	-5 cm/s
-150cm		-15 cm/s
	52 s	10 cm/s

2. The pictures below were taken by a high sped camera set up along the highway. Each car was photographed five times at one second intervals. (5)

Diagram A



Diagram B



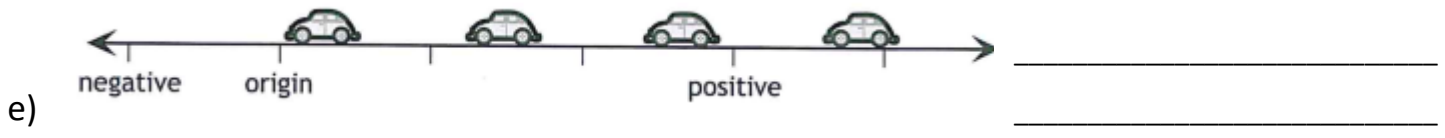
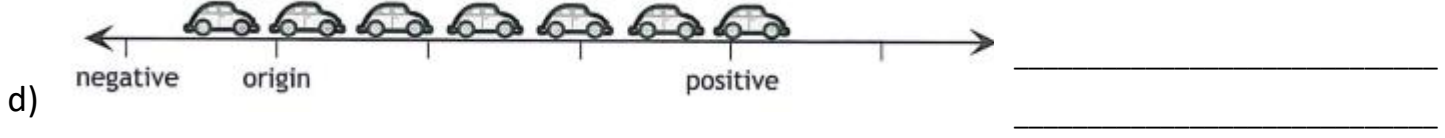
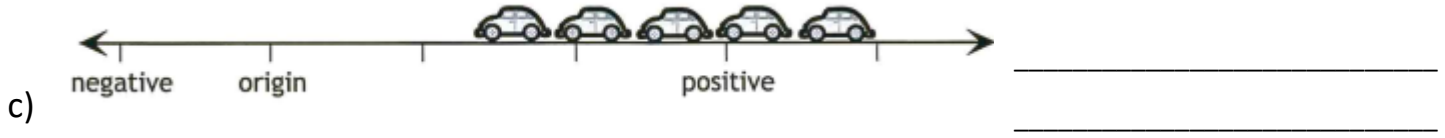
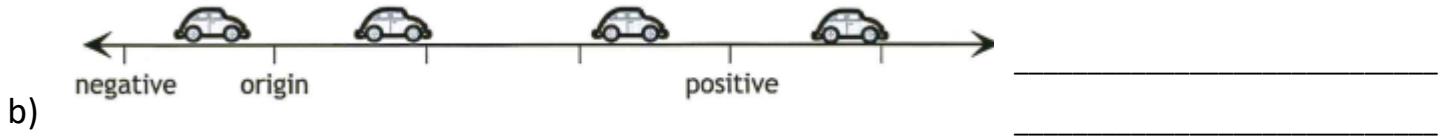
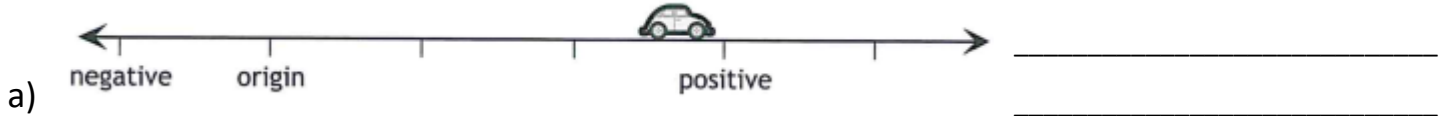
- a) Which diagram shows the car moving at a faster speed.
- b) Which diagram shows the car moving at a slower speed.
- c) Are the cars moving at constant motion? (Yes or no, or only 1 of them or none of them)

Position at	Time 0s	Time 1s	Time 2s	Time 3s	Time 4s
Car “A”	2 cm	4 cm	6 cm	8 cm	10 cm
Car “B”	0 cm	3 cm	6 cm	9 cm	12 cm

- d) Calculate the velocity of Diagram A:
- e) Calculate the velocity of Diagram B:


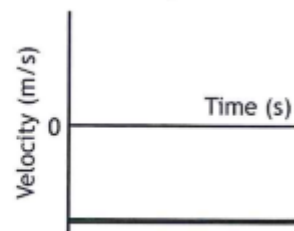
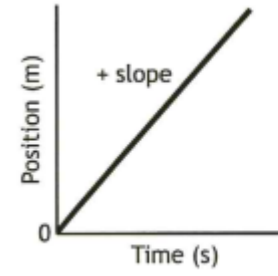
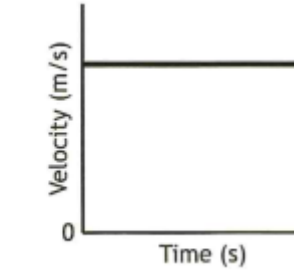
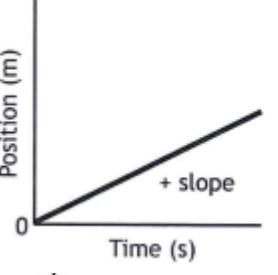
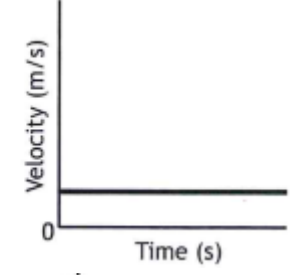
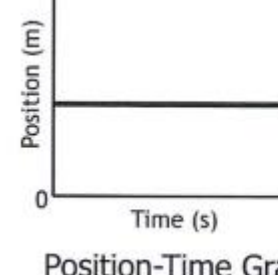
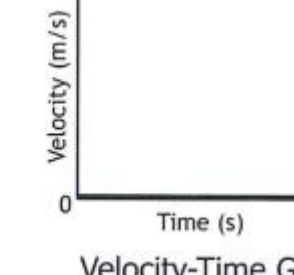
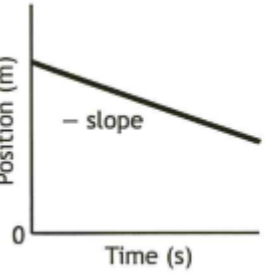
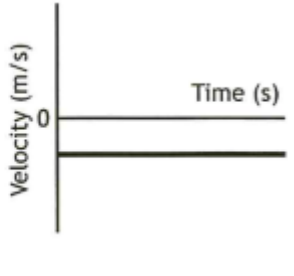
3. Using the word bank, place the words that coincide with the Car-Motion diagrams below. (Not sure, -> Check your notes) (5)

Slow positive uniform movement Fast positive uniform movement
 Fast negative uniform movement Slow negative uniform movement
 No Movement



4. Using the word bank, place the words that coincide with the Car-Motion diagrams below. (Not sure, -> Check your notes) (5)

Slow positive uniform movement Fast positive uniform movement
 Fast negative uniform movement Slow negative uniform movement
 No Movement

a)			a	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>
b)			b	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>
c)			c	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>
d)			d	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>
	Position-Time Graph	Velocity-Time Grap		
e)			e	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>