Regents Physics Homework

Name

- 1. A baseball is hit at 20.0 m/s N and travels through the air for 4.5 sec. What is its displacement?
- 2. A car begins at rest and then travels 10 km W turns and travels 5 km N. What is the magnitude and direction of the cars displacement?
- 3. A brick thrown in the air demonstrated the following info. Graph the data and answer the following questions.

Displacement (m)	Time (Sec)
0.0	0.0
1.0	1.0
1.5	2.0
1.7	3.0
1.9	4.0
2.0	5.0

- A. What kind of motion is the brick experiencing?
- B. How can you tell?
- 4. A car is driven and displays the following data

Displacement (m)	Time (min)
0.0	1
2.0	2
4.0	3
6.0	4
8.0	5
8.0	6
8.0	7
8.0	8
6.5	9
6.0	10
5.5	11
5.0	12

- A. What is the magnitude of the velocity of the car between 1.0 and 4 min? Between 5 min 7 min? Between 8 min and 12 min
- B. Describe the type of motion of the vehicle during the time periods listed in question 5a