Graphing Speed vs. Time

Graph the following data and answer the questions below.

Speed (km/h)	Time (s)
0.0	0
10.0	2
20.0	4
30.0	6
40.0	8
50.0	10
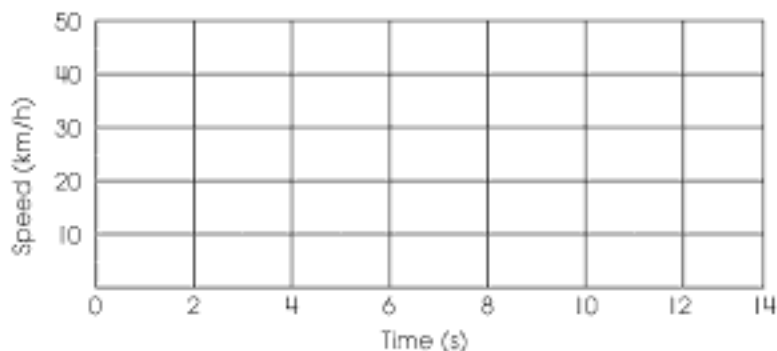
1. As time increases, what happens to the speed? _____

2. What is the speed at 5 s? _____

3. Assuming constant acceleration, what would be the speed at 14 s? _____

4. At what time would the object reach a speed of 45 km/h? _____

5. What is the object's acceleration? _____

6. What would the shape of the graph be if a speed of 50.0 km/h is maintained from 10 s to 20 s? _____

7. Based on the information in problem 6, calculate the acceleration from 10 s to 20 s.

   _____

8. What would the shape of the graph be if the speed of the object decreased from 50.0 km/h at 20 s to 30 km/h at 40 s? _____

9. What is the acceleration in problem 8? _____