Math 165 Worksheet 1
Section: ____________
Your Name: ____________________________
Names of group members: ____________________________

1. In the first graph make a rough sketch of what the graph will look like (vertical axis is distance, horizontal axis is time) if we maintain a steady pace for the whole distance. In the second graph plot the data points we collected.

(a) Do the graphs have a similar shape?
(b) What assumptions did you make that may have led to differences in the two graphs?

(c) What was the average speed (in feet per second)?

(d) What was the average speed for the first 8 feet?

(e) What was the average speed for feet 4-8?

(f) What was the average speed for feet 16-18?
2. In the first graph make a rough sketch of what the graph will look like (vertical axis is distance, horizontal axis is time) if we start accelerating and hit top speed after 12 feet and come to a complete stop at 24 feet. In the second graph plot the data points we collected.

(a) Do the graphs have a similar shape?
(b) What assumptions did you make that may have led to differences in the two graphs?

(c) What was the average speed (in feet per second)?
(d) What was the average speed between 10-14 feet?
(e) What was the top speed (in feet per second)?
(f) Is this the exact top speed or is it an estimate? Why or why not?
(g) How could we find a more accurate top speed?