

## Homework: Analyzing Change

Name: \_\_\_\_\_

1. The graph below shows the distance and time walked by 4 people.



Which person walked the fastest? How do you know?

2. Nihal's mother kept a record of how quickly Nihal grew over a 5 year period:

Date	Height
January 1, 1999	53 in
January 1, 2000	54 in
January 1, 2001	55 in
January 1, 2002	59 in
January 1, 2003	64 in

a. What was the **mean rate of change** per year in Nihal's height from 1999 to 2003?

b. During which year did Nihal grow the most?

3. Mark kept track of how much rain fell into a bucket on his front porch one evening. Here is his data:

Time	Height of water
5 pm	0 inches
6 pm	0.5 inches
9 pm	2.0 inches
11 pm	3.0 inches

a. What was the mean rate of rainfall from 5 pm to 9 pm?

b. What was the mean rate of rainfall from 5 pm to 11 pm?

c. According to Mark's data, was the rain falling at the same rate all night long? Why?