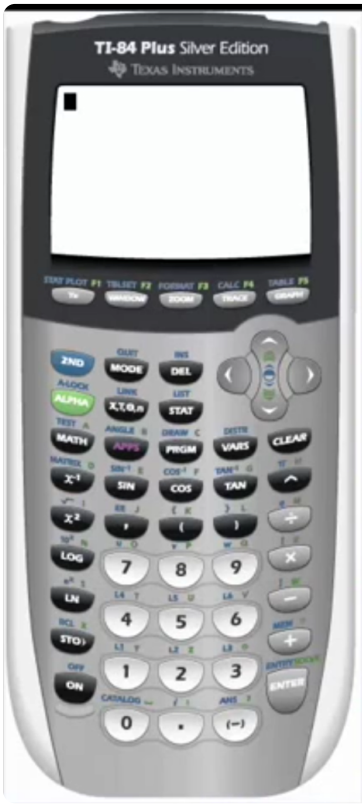
Calculate the 5-number summary and
the mean and standard deviation (nearest tenth):

3, 4, 4, 4, 6, 6,
7, 7, 8, 8, 8, 8
8, 8, 9, 9, 9, 10

5-Number summary _____ Mean _____ Standard Deviation _____



TI-84: Determining the Mean and Median with Frequency Table

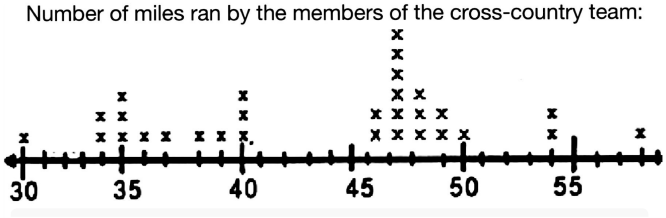
The table below shows the scores of a group of students on a 10-point quiz.

Test Score	Frequency
3	1
4	3
5	0
6	2
7	2
8	6
9	3
10	1

The mean score on this test is: _____

The median score on this test is: _____

Number of miles ran by the members of the cross-country team:



"A **line plot** is a graph that shows frequency of data along a number **line**. It is best to use a **line plot** when comparing fewer than 25 numbers. It is a quick, simple way to organize data."

In the above line plot, 1 person ran 30 miles, 2 people ran 34 miles, 3 people ran 35 miles, etc.

Round to the nearest tenth:

a) What is the mean of the data? _____

b) What percent of the runners ran less than the mean of _____ the data?

c) What is the median of the data? _____

d) What is the mode of the data? _____

e) What is the total number of miles ran by the entire team? _____

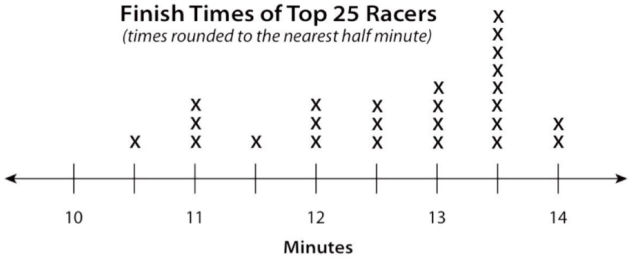
f) If the three laziest members of the team dropped off the team, _____ by how much (to the nearest tenth) does the mean increase?

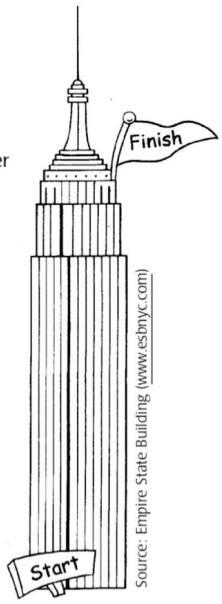
g) Find the percent increase _____

7 Line Plot: Who Needs the Elevator?

The Empire State Building Run-Up may just be the world's wackiest race. Each year, racers of all ages scramble up 1,576 steps to the Observatory deck on the 86th floor of the famous New York skyscraper. Look at the line plot to see how quickly the nimblest racers reach the top. Then answer the questions.

2004 Empire State Building Run-Up:
Finish Times of Top 25 Racers
(times rounded to the nearest half minute)





Source: Empire State Building (www.esbnyc.com)

1. What was the winner's time for the race? _____

2. How many racers finished in 13 minutes or less? _____

3. What was the most common finish time among the top 25 racers? _____

4. How many racers finished in less than 12 minutes? _____

5. Find the mean, median, & mode for the data

Mean = _____ Median = _____

mode = _____

6. If it was determined that the runner's time who finished 6th was incorrect, and that the actual time was 1 minute slower than the recorded time, find the percent increase in the average time of the top 25 runners in the race.

_____