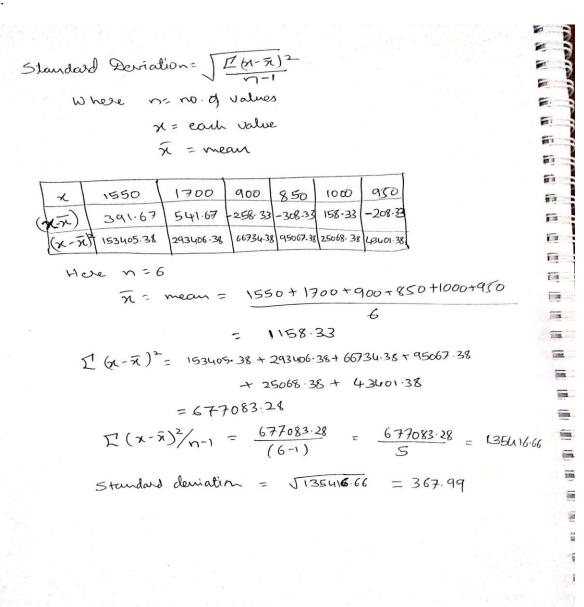
Problem Statement 1:

You survey households in your area to find the average rent they are paying. Find the

Standard deviation from the following data:

\$1550, \$1700, \$900, \$850, \$1000, \$950

Solution:



Problem Statement 2:

Find the variance for the following set of data representing trees in California (heights in feet):

3, 21, 98, 203, 17, 9

Solution:

$$51 = \text{mean} = \frac{3+21+98+203+17+9}{6} = \frac{351}{6} = 58.5$$

value =
$$\frac{1}{(x-\bar{x})^2} = \frac{31179.5}{5} = 62.9.9$$

Problem Statement 3:

In a class on 100 students, 80 students passed in all subjects, 10 failed in one subject, 7 failed in two subjects and 3 failed in three subjects. Find the probability distribution of the variable for number of subjects a student from the given class has failed in. Solution:

No. of Students passed in all subject = 80

No. of Students failed in one subject = 10

No. of students failed in two subject = 7

No. of students failed in two subjects = 3

Probability of failing in 0 subjects p(x=0)=0.6

Probability of failing in 1 subject p(x=1)=0.1

Probability of failing in 2 subject p(x=2) = 0.07

Probability of failing in 3 subject p(x=3)=0.03

Probability distribution can be shown as