



## Worksheet no.2

### Standard deviation

**No.1:** What is the standard deviation? Write its formula.

**Defination:** \_\_\_\_\_  
\_\_\_\_\_

**Formula:**

**No.2:** Find the asked values.

<b>(a) 52, 56, 74, 133, 136, 144, 157, 159</b>
Mean =
Square of Sum of difference =
Variance =
Standard deviation =

<b>(b) 119, 87, 138, 155, 141, 164, 82, 69</b>
Mean =
Square of Sum of difference =
Variance =
Standard deviation =

**(c) 0, 2, 3, 5, 7, 8, 9, 10**

Mean =

Square of Sum of difference =

Variance =

Standard deviation =

**(d) 13, 14, 17, 22, 23, 25, 29, 30**

Mean =

Square of Sum of difference =

Variance =

Standard deviation =

**(e) 72, 38, 43, 54, 25, 56, 77, 24**

Mean =

Square of Sum of difference =

Variance =

Standard deviation =

$\sqrt{\frac{STA}{DEV}}$   
**Solutions**

**No.2:**

<b>(a) 52, 56, 74, 133, 136, 144, 157, 159</b>
Mean = 10
Square of Sum of difference = 14430.070
Variance = 2060.982
Standard deviation = 45.398

<b>(b) 119, 87, 138, 155, 141, 164, 82, 69</b>
Mean = 119.375
Square of Sum of difference = 9060.280
Variance = 1293.982
Standard deviation = 35.972

<b>(c) 0, 2, 3, 5, 7, 8, 9, 10</b>
Mean = 5.5
Square of Sum of difference = 90
Variance = 12.857
Standard deviation = 3.586

**(d) 13, 14, 17, 22, 23, 25, 29, 30**

Mean = 21.625

Square of Sum of difference = 292.280

Variance = 41.696

Standard deviation = 6.457

**(e) 72, 38, 43, 54, 25, 56, 77, 24**

Mean = 48.625

Square of Sum of difference = 2745.160

Variance = 391.982

Standard deviation = 19.799