|  |
| --- |
| Number of Books (x) |
| 6 |
| 14 |
| 26 |
| 34 |
| 44 |
| 59 |
| 67 |
| 78 |

Calculate the mean (average)

1. Calculate mean (average)

6 + 14 + 26 + 34 + 48 + 59 + 67 + 78 = 328 /8 = 41

8

2 ) Calculate squared difference from mean

(6 – 41)² = (-35)2 =1225

(14 - 41) 2 = (-27) 2 = 729

(26 – 41) 2 = (-15) 2 = 225

(34 – 41) 2 = ( -7) 2= 49

(44 – 41) 2 = (3) 2 = 9

(59 – 41) 2 = (18) 2 = 324

(67 – 41) 2= (26) 2= 676

(78 – 41) 2 = (37) 2 = 1369

3) - Calculate the average squared differences

1225 + 729 + 225 + 49 + 9 + 324 + 676 + 1369 = 4606/8 = 575.75

8

4) square root of the variance

√575.75 = 24.0