1) Eight participants in a bike race had following finishing times in minutes:

28, 22, 26, 33, 21, 23, 37, 24.

Find the mean (26.75), median (25) and mode. Also find variance and standard deviation.

2) The monthly income (in thousand dollars) duration six months for two companies is listed in following table:

|  |  |
| --- | --- |
|  Company A | Company B |
| 950;775;925;2500;1150;850. | 850;875;1125;2400;1250;950. |

Find the a) mean value for both; b) median for both; c) standard deviation for both; d) compare the results.

3) The following number of books were read by each of the 28 students in a literature class:

|  |  |
| --- | --- |
| Number of books | Frequency (students) |
| 0 | 2 |
| 1 | 6 |
| 2 | 12 |
| 3 | 5 |
| 4 | 3 |

Find the:

 a) mean; (2.04)

 b) mode (2)

 c) median; (2)

 d) variance and standard deviation.

 e) $\overbar{x }\pm s$, $\overbar{x }\pm 2s$, $\overbar{x }\pm 3s$. (1.09; 1,04)

4) A sample of 50 personal property insurance policies found the following numbers of claims over the past 2 years:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Numbers of claims | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Numbers of policies | 21 | 13 | 5 | 4 | 2 | 3 | 2 |

Find the:

 a) mean; (1.4) c) median; (1)

 b) mode; (0) d) variance and standard deviation. e) $\overbar{x }\pm s$ (3.061; 1,75).