2.2) compute the standard deviation and range for the duration of hospitalization for the 25 patients.

5, 10, 6, 11, 5, 14, 30, 11, 17, 3, 9, 3, 8, 8, 5, 5, 7, 4, 3, 7, 9, 11, 11, 9, 4.

Table 2.12 Distribution of astigmatism in 1033 young men age 18-22

|  |  |
| --- | --- |
| Degree of astigmatism ( diopters) | Frequency |
| 0.0 or less than 0.2 | 458 |
| 0.2 – 0.3 | 268 |
| 0.4 – 0.5 | 151 |
| 0.6 – 0.1 | 79 |
| * 1. 2.0 | 44 |
| 2.1- 3.0 | 19 |
| 3.1- 4.0 | 9 |
| 4.1- 5.0 | 3 |
| 5.1- 6.0 | 2 |
|  | 1033 |

Table 2.12 comes from the paper giving the distribution of astigmatism in 1033 young men ranging in age from 18 to 22 who were accepted for military service in Great Britain. Assume that astigmatism is rounded to the nearest 10th of the diopter and each subject in a group has the average astigmatism within that group (e.g., for the group 0.2- 0.3 diopters, the actual range is from 0.15 to 0.35 diopters), and assume that each man in the group has an astigmatism of (0.15 + 0.35)/2=0.25 diopters.

2.8) compute the arithmetic mean.

2.9) compute the standard deviation.

2-19) compute the arithmetic mean and median for the difference in systolic and diastolic blood pressure, respectively taken in different positions (recumbent minus standing)

|  |  |
| --- | --- |
| Recumbent arm at side | Standing arm at heart level |
| 99 a 71 b | 105 79 |
| 126 74 | 124 76 |
| 108 72 | 102 86 |
| 122 68 | 114 72 |
| 104 64 | 96 62 |
| 108 60 | 96 56 |
| 116 70 | 106 70 |
| 106 74 | 106 76 |
| 118 82 | 120 90 |
| 92 58 | 88 60 |
| 110 78 | 102 80 |
| 138 80 | 124 76 |
| 120 70 | 118 84 |
| 142 88 | 136 90 |
| 118 58 | 92 58 |
| 134 76 | 126 68 |
| 118 72 | 108 68 |
| 126 78 | 114 76 |
| 108 78 | 94 70 |
| 136 86 | 144 88 |
| 110 78 | 100 64 |
| 120 74 | 106 70 |
| 108 74 | 94 74 |
| 132 92 | 128 88 |
| 102 68 | 96 64 |
| 118 70 | 102 68 |
| 116 76 | 88 60 |
| 118 80 | 100 84 |
| 110 74 | 96 70 |
| 122 72 | 118 78 |
| 106 62 | 94 56 |
| 146 90 | 138 94 |