|  |  |  |  |
| --- | --- | --- | --- |
| AGE | TALLY | FREQUENCY | PERCENTAGE |
| 19 | ~~|||| |||| ||~~ | 12 | 28% |
| 20 | ~~|||| |||| ||~~ | 12 | 29% |
| 21 | ~~|||| ||~~ | 7 | 17% |
| 22 | ~~|||| ||~~ | 7 | 17% |
| 23 | ||| | 3 | 7% |
| 30 | | | 1 | 2% |
| TOTAL | 42 | | 100% |

|  |  |  |  |
| --- | --- | --- | --- |
| HEIGHT | TALLY | FREQUENCY | PERCENTAGE |
| 131-143 | | | 1 | 2% |
| 144-156 | ~~|||| ||||~~ | 10 | 24% |
| 157-169 | ~~|||| |||| ||||~~ || | 17 | 41% |
| 170-182 | ~~|||| ||||~~ ||| | 13 | 31% |
| 183-195 | | | 1 | 2% |
| TOTAL | 42 | | 100% |

|  |  |  |  |
| --- | --- | --- | --- |
| MONTHLY FAMILY INCOME | TALLY | FREQUENCY | PERCENTAGE |
| 5000 | ~~|||| ||||~~ || | 12 | 29% |
| 6000 | |||| | 4 | 10% |
| 10000 | ~~|||| |||| ||||\_~~| | 16 | 38% |
| 15000 | | | 1 | 2% |
| 20000 | | | 1 | 2% |
| 25000 | | | 1 | 2% |
| 30000 | |||| | 4 | 10% |
| 40000 | || | 2 | 5% |
| 50000 | | | 1 | 2% |
| TOTAL | 42 | | 100% |

|  |  |  |  |
| --- | --- | --- | --- |
| FAMILY MEMBER | TALLY | FREQUENCY | PERCENTAGE |
| 3 | ~~|||| |~~ | 6 | 14.29% |
| 4 | ~~|||| ||||~~ |||| | 14 | 33.33% |
| 5 | ~~|||| ||~~ | 7 | 16.67% |
| 6 | ~~|||| |||~~ | 8 | 19.05% |
| 7 | ||| | 3 | 7.14% |
| 9 | || | 2 | 4.76% |
| 12 | || | 2 | 4.76% |
| TOTAL | 42 | | 100% |

|  |  |  |  |
| --- | --- | --- | --- |
| WEIGHT | TALLY | FREQUENCY | PERCENTAGE |
| 35-40 | |||| | 4 | 9% |
| 41-45 | ~~||||~~ | 5 | 12% |
| 46-50 | ~~||||~~ ||| | 8 | 19% |
| 51-55 | ~~||||~~ || | 7 | 17% |
| 56-60 | ~~|||| ||||~~ | 10 | 24% |
| 61-65 | || | 2 | 5% |
| 66-70 | |||| | 4 | 10% |
| 71-75 | || | 2 | 5% |
| TOTAL |  | 42 | 100% |

|  |  |  |  |
| --- | --- | --- | --- |
| DAILY ALLOWANCE | TALLY | FREQUENCY | PERCENTAGE |
| 50 | |||| | 4 | 10% |
| 100 | ~~|||| |||| |||| |||| ||||~~ | | 26 | 62% |
| 150 | ~~||||~~ | 5 | 12% |
| 200 | |||| | 4 | 10% |
| 250 | || | 2 | 5% |
| 500 | | | 1 | 2% |
| TOTAL |  | 42 | 100% |

|  |  |  |  |
| --- | --- | --- | --- |
| HOBBIES | TALLY | F | PERCENTAGE |
| SINGING | ~~||||~~ | | 6 | 14% |
| ONLINE GAMES | ~~||||~~ ||| | 8 | 19% |
| BASKETBALL | ~~||||~~ |||| | 9 | 21% |
| VOLLEYBALL | ||| | 3 | 7% |
| DANCING | ||| | 3 | 7% |
| WATCHING MOVIE | || | 2 | 5% |
| READING | ~~||||~~ | 5 | 12% |
| COOKING | |||| | 4 | 10% |
| N/A | || | 2 | 5% |
| TOTAL | 42 | | 100% |

|  |  |  |  |
| --- | --- | --- | --- |
| OCCUPATION OF (MOTHER) | TALLY | frequency | PERCENTAGE |
| HOUSEWIFE | ~~|||| |||| |||| |||| ||||~~ | 25 | 60% |
| FARMER | || | 2 | 5% |
| TEACHER | | | 1 | 3% |
| CAREGIVER | | | 1 | 2% |
| N/A | ~~||||~~ || | 7 | 17% |
| SWEPPER | | | 1 | 2% |
| OFW | ||| | 3 | 7% |
| VENDOR | | | 1 | 2% |
| FISH DEALER | | | 1 | 2% |
| TOTAL | 42 | | 100% |

|  |  |  |  |
| --- | --- | --- | --- |
| OCCUPATION OF (FATHER) | TALLY | FREQUENCY | PERCENTAGE |
| CONSTRACTION WORKER | ~~||||~~ || | 7 | 17% |
| FARMER | ~~||||~~ |||| | 9 | 21% |
| SEAMAN | ||| | 3 | 7% |
| ARMY | | | 1 | 2% |
| N/A | ~~|||| ||||~~ ||| | 13 | 31% |
| FISH DEALER | ||| | 3 | 7% |
| DRIVER | ||| | 3 | 7% |
| TRICYCLE DRIVER | ||| | 3 | 7% |
| TOTAL | 42 | 100% |  |

|  |  |  |  |
| --- | --- | --- | --- |
| ADDRESS | TALLY | F | PERCENTAGE |
| MAMBUSAO | ~~|||| |||| ||||~~ | | 16 | 38% |
| SAPAIN | ~~|||| ||||~~ ||| | 13 | 31% |
| DAO | || | 2 | 5% |
| JAMINDAN | ~~||||~~ | 5 | 12% |
| SIGMA | |||| | 4 | 10% |
| DUMALAG | | | 1 | 2% |
| CUARTERO | | | 1 | 2% |
| TOTAL | 42 | | 100% |

|  |  |  |  |
| --- | --- | --- | --- |
| SECTION | TALLY | FREQUENCY | PERCENTAGE |
| C | ~~|||| |||| |||| |||| |||| ||||~~ | | 31 | 74% |
| D | ~~|||| ||||~~ | | 11 | 26% |
| TOTAL | 42 | | 100% |

**ACTIVITY 5**

**Using the data gathered.**

1. 5 EXAMPLES OF COMPUTING **STANDARD DEVIATION** FOR UNGROUPED DATA:
2. GIVEN SAMPLE **AGE** OF RESPONDENTS

|  |  |  |  |
| --- | --- | --- | --- |
| **RESPONDENTS** | **AGE (X)** |  |  |
| 1 | 20 | 1 | 1 |
| 2 | 20 | 1 | 1 |
| 3 | 20 | 1 | 1 |
| 4 | 19 | 2 | 4 |
| 5 | 19 | 2 | 4 |
| 6 | 20 | 1 | 1 |
| 7 | 19 | 2 | 4 |
| 8 | 19 | 2 | 4 |
| 9 | 21 | 0 | 0 |
| 10 | 20 | 1 | 1 |
| 11 | 19 | 2 | 4 |
| 12 | 19 | 2 | 4 |
| 13 | 19 | 2 | 4 |
| 14 | 20 | 1 | 1 |
| 15 | 19 | 2 | 4 |
| 16 | 30 | 9 | 81 |
| 17 | 20 | 1 | 1 |
| 18 | 19 | 2 | 4 |
| 19 | 19 | 2 | 4 |
| 20 | 19 | 2 | 4 |
| 21 | 20 | 1 | 1 |
| 22 | 19 | 2 | 4 |
| 23 | 21 | 0 | 0 |
| 24 | 20 | 1 | 1 |
| 25 | 21 | 0 | 0 |
| 26 | 20 | 1 | 1 |
| 27 | 21 | 0 | 0 |
| 28 | 20 | 1 | 1 |
| 29 | 21 | 0 | 0 |
| 30 | 20 | 1 | 1 |
| 31 | 20 | 1 | 1 |
| 32 | 23 | 2 | 4 |
| 33 | 23 | 2 | 4 |
| 34 | 22 | 1 | 1 |
| 35 | 21 | 0 | 0 |
| 36 | 22 | 1 | 1 |
| 37 | 22 | 1 | 1 |
| 38 | 23 | 2 | 4 |
| 39 | 22 | 1 | 1 |
| 40 | 21 | 0 | 0 |
| 41 | 22 | 1 | 1 |
| 42 | 22 | 1 | 1 |
| **Total:** | **866** |  | **160** |

|  |
| --- |
| **or 21** |
|  |

1. GIVEN SAMPLE **HEIGHT** OF RESPONDENTS

|  |  |  |  |
| --- | --- | --- | --- |
| **RESPONDENTS** | **HEIGHT** |  |  |
| 1 | 164 | 0 | 0 |
| 2 | 170 | 6 | 36 |
| 3 | 170 | 6 | 36 |
| 4 | 152 | 12 | 144 |
| 5 | 182 | 18 | 324 |
| 6 | 152 | 12 | 144 |
| 7 | 170 | 6 | 36 |
| 8 | 171 | 7 | 49 |
| 9 | 174 | 10 | 100 |
| 10 | 162 | 2 | 4 |
| 11 | 159 | 5 | 25 |
| 12 | 170 | 6 | 36 |
| 13 | 166 | 2 | 4 |
| 14 | 174 | 10 | 100 |
| 15 | 168 | 4 | 16 |
| 16 | 152 | 12 | 144 |
| 17 | 168 | 4 | 16 |
| 18 | 166 | 2 | 4 |
| 19 | 170 | 6 | 36 |
| 20 | 150 | 14 | 196 |
| 21 | 160 | 4 | 16 |
| 22 | 165 | 1 | 1 |
| 23 | 167 | 3 | 9 |
| 24 | 154 | 10 | 100 |
| 25 | 169 | 5 | 25 |
| 26 | 149 | 15 | 225 |
| 27 | 167 | 3 | 9 |
| 28 | 142 | 22 | 484 |
| 29 | 153 | 11 | 121 |
| 30 | 153 | 11 | 121 |
| 31 | 180 | 16 | 256 |
| 32 | 170 | 6 | 36 |
| 33 | 165 | 1 | 1 |
| 34 | 162 | 2 | 4 |
| 35 | 148 | 16 | 256 |
| 36 | 165 | 1 | 1 |
| 37 | 168 | 4 | 16 |
| 38 | 171 | 7 | 49 |
| 39 | 168 | 4 | 16 |
| 40 | 183 | 19 | 361 |
| 41 | 170 | 6 | 36 |
| 42 | 167 | 3 | 9 |
| Total: | **6909** | **314** | **3602** |

|  |
| --- |
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1. GIVEN SAMPLE **WEIGHT** OF RESPONDENTS.

|  |  |  |  |
| --- | --- | --- | --- |
| **RESPONDENTS** | **WEIGHT:** |  |  |
| 1 | 56 | 2 | 4 |
| 2 | 50 | 4 | 16 |
| 3 | 58 | 4 | 16 |
| 4 | 40 | 14 | 196 |
| 5 | 43 | 11 | 121 |
| 6 | 36 | 18 | 324 |
| 7 | 59 | 5 | 25 |
| 8 | 60 | 6 | 36 |
| 9 | 50 | 4 | 16 |
| 10 | 43 | 11 | 121 |
| 11 | 50 | 4 | 16 |
| 12 | 57 | 3 | 9 |
| 13 | 56 | 2 | 4 |
| 14 | 60 | 6 | 36 |
| 15 | 55 | 1 | 1 |
| 16 | 50 | 4 | 16 |
| 17 | 51 | 3 | 9 |
| 18 | 54 | 0 | 0 |
| 19 | 50 | 4 | 16 |
| 20 | 48 | 6 | 36 |
| 21 | 50 | 4 | 16 |
| 22 | 53 | 1 | 1 |
| 23 | 75 | 21 | 441 |
| 24 | 40 | 14 | 196 |
| 25 | 70 | 16 | 256 |
| 26 | 68 | 14 | 196 |
| 27 | 43 | 11 | 121 |
| 28 | 42 | 12 | 144 |
| 29 | 47 | 7 | 49 |
| 30 | 43 | 11 | 121 |
| 31 | 70 | 16 | 256 |
| 32 | 71 | 17 | 289 |
| 33 | 55 | 1 | 1 |
| 34 | 61 | 7 | 49 |
| 35 | 38 | 16 | 256 |
| 36 | 70 | 16 | 256 |
| 37 | 55 | 1 | 1 |
| 38 | 62 | 8 | 64 |
| 39 | 55 | 1 | 1 |
| 40 | 56 | 2 | 4 |
| 41 | 60 | 6 | 36 |
| 42 | 60 | 6 | 36 |
| Total: | **2270** |  | **3808** |

|  |
| --- |
|  |
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|  |  |  |  |
| --- | --- | --- | --- |
| **RESPONDENTS** | **Daily allowance** |  |  |
| 1 | 100 | 29 | 841 |
| 2 | 250 | 121 | 14641 |
| 3 | 500 | 371 | 137641 |
| 4 | 100 | 29 | 841 |
| 5 | 100 | 29 | 841 |
| 6 | 50 | 79 | 6241 |
| 7 | 100 | 29 | 841 |
| 8 | 100 | 29 | 841 |
| 9 | 50 | 79 | 6241 |
| 10 | 100 | 29 | 841 |
| 11 | 100 | 29 | 841 |
| 12 | 100 | 29 | 841 |
| 13 | 100 | 29 | 841 |
| 14 | 50 | 79 | 6241 |
| 15 | 100 | 29 | 841 |
| 16 | 150 | 21 | 441 |
| 17 | 150 | 21 | 441 |
| 18 | 100 | 29 | 841 |
| 19 | 200 | 71 | 5041 |
| 20 | 100 | 29 | 841 |
| 21 | 100 | 29 | 841 |
| 22 | 250 | 121 | 14641 |
| 23 | 100 | 29 | 841 |
| 24 | 100 | 29 | 841 |
| 25 | 150 | 21 | 441 |
| 26 | 200 | 71 | 5041 |
| 27 | 150 | 21 | 441 |
| 28 | 100 | 29 | 841 |
| 29 | 200 | 71 | 5041 |
| 30 | 200 | 71 | 5041 |
| 31 | 100 | 29 | 841 |
| 32 | 100 | 29 | 841 |
| 33 | 100 | 29 | 841 |
| 34 | 100 | 29 | 841 |
| 35 | 100 | 29 | 841 |
| 36 | 100 | 29 | 841 |
| 37 | 150 | 21 | 441 |
| 38 | 100 | 29 | 841 |
| 39 | 100 | 29 | 841 |
| 40 | 100 | 29 | 841 |
| 41 | 100 | 29 | 841 |
| 42 | 100 | 29 | 841 |
| Total: | **5400** |  | **230722** |

1. GIVEN SAMPLE **DAILY ALLOWANCE** OF RESPONDENTS.

|  |
| --- |
|  |
|  |

1. GIVEN SAMPLE **FAMILY MEMBER** OF RESPONDENTS.

|  |  |  |  |
| --- | --- | --- | --- |
| **RESPONDENTS** | **FAMILY MEMBER** |  |  |
| 1 | 6 | 1 | 1 |
| 2 | 5 | 0 | 0 |
| 3 | 5 | 0 | 0 |
| 4 | 12 | 7 | 49 |
| 5 | 6 | 1 | 1 |
| 6 | 12 | 7 | 49 |
| 7 | 6 | 1 | 1 |
| 8 | 5 | 0 | 0 |
| 9 | 6 | 1 | 1 |
| 10 | 4 | 1 | 1 |
| 11 | 6 | 1 | 1 |
| 12 | 3 | 2 | 4 |
| 13 | 4 | 1 | 1 |
| 14 | 4 | 1 | 1 |
| 15 | 4 | 1 | 1 |
| 16 | 7 | 2 | 4 |
| 17 | 3 | 2 | 4 |
| 18 | 4 | 1 | 1 |
| 19 | 3 | 2 | 4 |
| 20 | 4 | 1 | 1 |
| 21 | 4 | 1 | 1 |
| 22 | 7 | 2 | 4 |
| 23 | 4 | 1 | 1 |
| 24 | 5 | 0 | 0 |
| 25 | 7 | 2 | 4 |
| 26 | 4 | 1 | 1 |
| 27 | 9 | 4 | 16 |
| 28 | 9 | 4 | 16 |
| 29 | 5 | 0 | 0 |
| 30 | 3 | 2 | 4 |
| 31 | 4 | 1 | 1 |
| 32 | 4 | 1 | 1 |
| 33 | 5 | 0 | 0 |
| 34 | 4 | 1 | 1 |
| 35 | 5 | 0 | 0 |
| 36 | 4 | 1 | 1 |
| 37 | 3 | 2 | 4 |
| 38 | 6 | 1 | 1 |
| 39 | 4 | 1 | 1 |
| 40 | 3 | 2 | 4 |
| 41 | 6 | 1 | 1 |
| 42 | 6 | 1 | 1 |
| Total: | **220** |  | **188** |

|  |
| --- |
|  |
|  |

1. 5 EXAMPLES OF COMPUTING **STANDARD DEVIATION** FOR GROUPED DATA:
2. **GIVEN SAMPLE AGE OF RESPONDENTS:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| AGE | FREQUENCY | Xi | fiXi |  |  |  |  |
| 19 – 20 | 24 | 19.5 | 468 | 1.5 | 36 | 2.25 | 54 |
| 21 – 22 | 14 | 21.5 | 301 | 0.5 | 7 | 0.25 | 3.5 |
| 23 – 24 | 3 | 23.5 | 70.5 | 2.5 | 7.5 | 6.25 | 18.75 |
| 25 – 26 | 0 | 25.5 | 0 | 4.5 | 0 | 20.25 | 0 |
| 27 – 28 | 0 | 27.5 | 0 | 6.5 | 0 | 42.25 | 0 |
| 29 – 30 | 1 | 29.5 | 29.5 | 8.5 | 8.5 | 72.25 | 72.25 |
|  | **n = 42** |  | **869** |  | **59** |  | **148.5** |

|  |  |
| --- | --- |
|  | **1.90** |

1. **GIVEN SAMPLE HEIGHT OF RESPONDENTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| HEIGHT | FREQUENCY | Xi | fiXi |  |  |  |  |
| 142 – 148 | 2 | 145 | 290 | 19.5 | 39 | 380.25 | 760.5 |
| 149 – 155 | 8 | 152 | 1216 | 12.5 | 100 | 156.25 | 1250 |
| 156 – 162 | 4 | 159 | 636 | 5.5 | 22 | 30.25 | 121 |
| 163 – 169 | 14 | 166 | 2324 | 1.5 | 21 | 2.25 | 31.5 |
| 170 – 176 | 11 | 173 | 1903 | 8.5 | 93.5 | 72.25 | 794.75 |
| 177 – 183 | 3 | 180 | 540 | 15.5 | 46.5 | 240.25 | 720.75 |
| **TOTAL:** | **42** |  | **6909** |  | **322** |  | **3678.5** |

|  |  |
| --- | --- |
|  | **9.47** |

1. **GIVEN SAMPLE WEIGHT OF RESPONDENTS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| WEIGHT | FREQUENCY | Xi | fiXi |  |  |  |  |
| 36 – 42 | 5 | 39 | 195 | 15 | 75 | 225 | 1125 |
| 43 – 49 | 6 | 46 | 276 | 8 | 48 | 64 | 384 |
| 50 – 56 | 16 | 53 | 848 | 1 | 16 | 1 | 16 |
| 57 – 63 | 9 | 60 | 540 | 6 | 54 | 36 | 324 |
| 64 – 70 | 4 | 67 | 268 | 13 | 52 | 169 | 676 |
| 71 – 77 | 2 | 74 | 148 | 20 | 40 | 400 | 800 |
| **TOTAL:** | **42** |  | **2275** |  | **285** |  | **3325** |

|  |  |
| --- | --- |
|  | **9.005** |

1. GIVEN SAMPLE **Family member** OF RESPONDENTS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Family Member | FREQUENCY | Xi **(LL+UL)/2** | fiXi |  |  |  |  |
| 3 – 4 | 20 | 3.5 | 70 | 1.5 | 30 | 2.25 | 45 |
| 5 – 6 | 15 | 5.5 | 82.5 | 0.5 | 7.5 | 0.25 | 3.75 |
| 7 – 8 | 3 | 7.5 | 22.5 | 2.5 | 7.5 | 6.25 | 18.75 |
| 9 – 10 | 2 | 9.5 | 19 | 4.5 | 9 | 20.25 | 40.5 |
| 11 – 12 | 2 | 11.5 | 23 | 6.5 | 13 | 42.25 | 84.5 |
| **Total:** | **42** |  | **217** |  |  |  | **192.5** |

|  |  |
| --- | --- |
|  | **2.16** |

1. GIVEN SAMPLE **Monthly Allowance** OF RESPONDENTS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Family Member | FREQUENCY | Xi **(LL+UL)/2** | fiXi |  |  |  |  |
| 5,000 – 12,499 | 32 | 8749.5 | 279984 | -5535.5 | -177136 | 30641760.25 | 980536328 |
| 12,500 – 19,999 | 1 | 16249.5 | 16249.5 | 16249.5 | 16249.5 | 264046250.3 | 264046250.3 |
| 20,000 – 27,499 | 2 | 23749.5 | 47499 | 23749.5 | 47499 | 564038750.3 | 1128077501 |
| 27,500 – 34,999 | 4 | 31249.5 | 124998 | 31249.5 | 124998 | 976531250.3 | 3906125001 |
| 35,000 – 42,499 | 2 | 38749.5 | 77499 | 38749.5 | 77499 | 1501523750 | 3003047501 |
| 42,500 – 49,999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 50,000 – 57,499 | 1 | 53749.5 | 53749.5 | 53749.5 | 53749.5 | 2889008750 | 2889008750 |
| **Total:** | **42** |  | **599979** |  |  |  | **12170841331** |

|  |  |
| --- | --- |
|  | **17229.3** |