**Larry Schrenk, Instructor**

**Problem Set: Statistics**

**(Solutions Below)**

**Mean, Mode, and Median**

1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 12 | 15 | 23 | 15 | 36 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 | 5 | 7 | 2 | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 12.4 | 12.6 | 12.3 | 12.8 | 12.3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 100 | 120 | 115 | 120 | 130 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 9 | 10 | 8 | 10 | 11 | 5 | 7 | 5 |

**Standard Deviation and Variance**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 13 | 13 | 12 | 15 | 20 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| -10 | 35 | 21 | 54 | -8 |

1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| -4% | 7% | 9% | 11% | 14% |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1,000 | 2,222 | 1,504 | 2,343 | 3,550 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 4.30 | 6.81 | 2.34 | 8.87 | 7.14 |

**Covariance and Correlation**

1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 4 | 3 | 1 | 5 |
| 1 | 2 | 4 | 2 | 6 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 100 | 120 | 111 | 130 | 120 |
| 200 | 240 | 260 | 280 | 130 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.12 | 2.33 | 4.77 | 2.11 | 0.09 |
| 4.57 | 6.72 | 3.42 | 2.19 | 3.75 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 0.37 | 0.54 | 0.99 | 0.37 | 0.67 |
| 0.09 | 0.81 | 0.57 | 0.69 | 0.58 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 0.24 | 0.98 | 0.23 | 0.17 | 0.16 |
| 500 | 600 | 7300 | 4200 | 9700 |

**Solutions**

**Mean, Mode, and Median**











**Standard Deviation and Variance**











**Covariance and Correlation**





1. 
2. 
3.

