**FOM 11**

**Central Tendencies**

1. The minimum daily temperatures in Edmonton during an 11 day period are shown below. Calculate to the nearest tenth, the mean, median, and mode. Show your strategies for each.

8.6, 7.3, 10.7, 15.2, 9.3, 8.6, 7.3, 8.5, 7.3, 5.9, 1.0

|  |  |  |
| --- | --- | --- |
| Mean | Median | Mode |
|  |  |  |

1. In the annual teachers vs students golf challenge, the scores of the ten teachers were:

74, 74, 77, 78, 79, 81, 85, 85, 86, 146

* 1. Calculate the mean, median, and mode

|  |  |  |
| --- | --- | --- |
| Mean | Median | Mode |
|  |  |  |

* 1. Which of these best represents the data? Why? Explain. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. If the mean of the data 20, 10, 15, 14, 9, 9, x, 8 is 12. Find the value of x.
2. A student in a grde 11 autobody class has been assessed on the following four modules and her marks are shown:

Metal repair – 80%

Surface preparation – 76%

Trim replacement – 73%

Refinishing – 86%

What mark must she achieve in the last module (touch up and finishing) in order to complete the course with an 80% overall?

1. The frequency table below represents the number of students absent from class during the month of January. Calculate to the nearest hundredth the mean, median, and mode.

|  |  |
| --- | --- |
| Number of absent students | Number of days |
| 0 | 8 |
| 1 | 4 |
| 2 | 7 |
| 3 | 0 |
| 4 | 2 |
| 5 | 1 |

1. The number of patients treated per month in the ER department at Penticton hospital is shown below.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
| 871 | 742 | 850 | 801 | 748 | 693 | 672 | 721 | 803 | 814 | 863 | 948 |

Calculate to the nearest whole number the mean and median number of patients.

1. A study done by Telus on the mobile data habits of 60,000 subscribers found that, on average, teenagers aged 13 – 17 send and receive more than 3300 texts per month. The number of texts sent and received by a 16 year old student, Spencer, over a 14 day period is shown below

80, 122, 75, 105, 100, 115, 82, 93, 99, 100, 71, 52, 135, 123

* 1. Calculate the mean and median, to the nearest whole number, of the number of texts Spencer sent and received per day.
  2. If Spencer maintained this daily rate throughout the course of the year, would his mobile data habits be regarded as below or above average with respect to the Telus statistics?