

1. Joel researched the average daily temperature in Lloydminster SK.

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
average daily temp (°C)	-10.0	-17.5	-5.0	3.7	10.7	14.3	20.1	14.0	9.8	4.8	-5.8	-14.8

Determine the median, mean, and range of the average daily temperatures in Lloydminster.

2. Environment Canada compiled data on the number of lightning strikes per square kilometre in Saskatchewan and Manitoba towns from 1999 to 2008.

2.03 1.31 0.25 1.03 1.20 0.17 0.43 0.80 0.72
 0.99 1.01 0.24 0.94 0.92 0.09 0.46 0.58 0.49
 0.86 0.71 0.05 0.81 0.63 0.01 0.40 0.00 0.52

a) Using an interval width of 0.25 and starting at 0.00, complete the frequency table.

Lightning Strikes/km ²	Tally	Frequency
0.00 – 0.24		
0.25 – 0.49		

b) Graph a histogram with the data above.



3. Environment Canada compiled data on the number of lightning strikes per square kilometre in Saskatchewan and Manitoba towns from 1999 to 2008.

2.03 1.31 0.25 1.03 1.20 0.17 0.43 0.80 0.72
 0.99 1.01 0.24 0.94 0.92 0.09 0.46 0.58 0.49
 0.86 0.71 0.05 0.81 0.63 0.01 0.40 0.00 0.52

a) Complete the frequency table using an interval width of 0.50 and start at 0.00

Lightning Strikes/km ²	Tally	Frequency
0.00 – 0.49		
0.50 – 0.99		
1.00 – 1.49		
1.50 – 1.99		
2.00 – 2.49		

b) Which range of data has no entries?

4. Environment Canada compiled data on the number of lightning strikes per square kilometre in Ontario towns from 1999 to 2008.

3.60 2.11 0.96 0.65 2.38 1.90 0.72 0.63
 3.47 2.04 0.90 0.65 2.25 1.33 0.70 0.38
 2.53 1.90 0.85 0.65 2.25 1.13 0.66 0.19

Create a frequency table that starts at 0.00 and has a width of 1.00.

Lightning Strikes (per km ²)	Tally	Frequency

5. A company measured the lifespan of a random sample of 40 batteries in their MP3 players. Times are in hours.

7.8 11.0 10.5 8.8 9.1 9.4 11.2 9.4 8.6 9.0
 9.3 8.5 7.9 9.1 7.1 9.3 9.4 9.7 10.6 8.5
 9.2 8.2 7.4 8.8 8.6 8.0 8.0 11.1 9.2 11.4
 8.2 9.6 8.5 10.5 10.7 9.5 11.4 8.2 9.7 8.5

If the interval width is 1.0 and starts at 6.5, what is the last interval?

a) Histogram



b) Frequency Polygon



c. Box and Whisker Plot

Enter the data in L_1 of your calculator.

Record the following values:

- Mean
- Minimum:
- Q_1 :
- Median:
- Q_3 :
- Maximum:

We can use this data to create a box and whisker plot:

- Scale the number line using the intervals from your histogram.
 - On the number line, place a point at the minimum, the maximum and each of the quartile points (median is also Q_2).
 - Draw a rectangle that begins at Q_1 and ends at Q_3 . The rectangle should go above and below the number line with symmetry.
 - At the median point, add another line to separate the rectangle; the median line does not need to cut the rectangle in half.
 - From the minimum point to the maximum point, draw a thick line.
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