

# 6.SP.4 Worksheet

## Solutions

Refer to the following information to solve problems 1-4. A group of fifteen P.E. teachers were asked how many times per week they work out. The data 0, 0, 1, 2, 2, 3, 3, 3, 4, 4, 4, 5, 5, 5, 6 was collected.

1. Create a frequency distribution for this data.

Number of Workouts	Frequency
0	2
1	1
2	2
3	3
4	3
5	3
6	1

2. Create a dot plot for this data.



3. Write down the five-number summary for this distribution.

Minimum	0
Lower Quartile	2
Median	4
Upper Quartile	5
Maximum	6

4. Using the answer you gave above, create a box plot for this distribution.

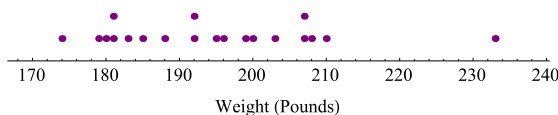


Refer to the data in Figure 1 to solve problems 5-10. The following data set is the weights, in pounds, of the 20 players on the Saskatchewan Moose Lovers hockey team.

Weight (lbs) of Players in Saskatchewan Moose Lovers Hockey
181
196
180
208
233
203
192
174
199
210
181
207
179
185
207
200
183
192
195
188

Figure 1.

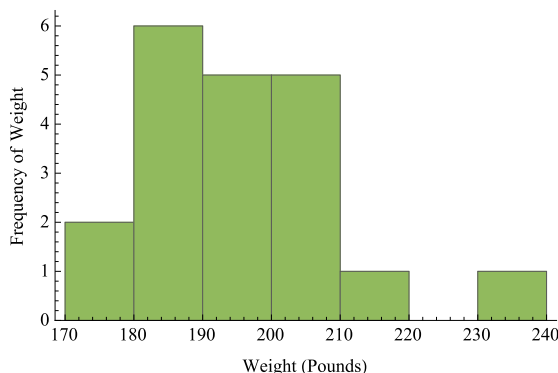
5. Create a dot plot for this distribution.



6. Create a grouped frequency table for this data. The first group should begin with 170 pounds and the width of each group should be ten.

Weights	Frequency
170 to 180	2
180 to 190	6
190 to 200	5
200 to 210	5
210 to 220	1
220 to 230	0
230 to 240	1

7. If another player whose weight is 220 pounds were added, would his weight be included in the 210 to 220 pound group, the 220 to 230 pound group, or both? [The 220 to 230 pound group](#)
8. Using your answers to problems 5-7, create a histogram for this distribution.



9. Add an additional column to the grouped frequency table in number six displaying the relative frequencies for each group. Express these relative frequencies as decimals.

Weights	Frequency	Relative Frequencies
170 to 180	2	0.10
180 to 190	6	0.30
190 to 200	5	0.25
200 to 210	5	0.25
210 to 220	1	0.05
220 to 230	0	0
230 to 240	1	0.05

10. Create a histogram representing the table in the previous question. Display the relative frequencies on the vertical axis.

