Name:_____ Date:_____

Mark has an assortment of crayons in his crayon box. Combined, all his crayons total 6 ½ inches. He decided to sort some of the crayons that he has based on their lengths. He first created a frequency table of the crayons he wants to sort.

1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8
3	2	3	0	2	2	1	0

1. Create a line plot to represent the data below. Make sure to include title and label the line.

2. What is the total length of the crayons that he sorted, if they are connected from end to end?

3. What is the length of pencils that are left over?

4. Based on the crayons that Marvin sorted, what will be the length of a typical pencil if the crayons were cut into pieces of equal length?

5. What is the length of the crayons sorted that are at least ½ inch long?

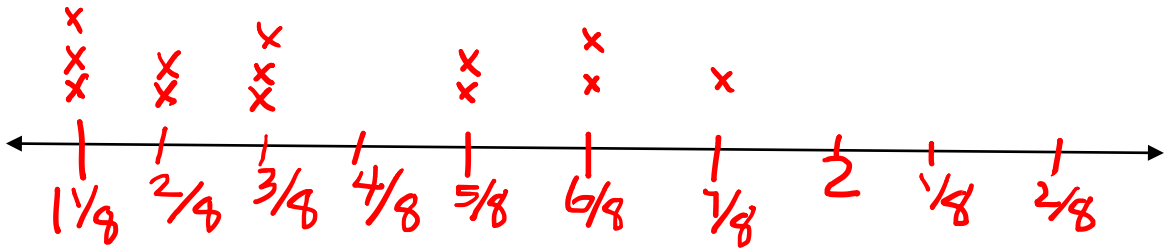
Name:_____ Date:_____

Mark has an assortment of crayons in his crayon box. Combined, all his crayons total 19 ½ inches. He decided to sort some of the crayons that he has based on their lengths. He first created a frequency table of the crayons he wants to sort.

1 1/8	1 2/8	1 3/8	1 4/8	1 5/8	1 6/8	1 7/8	1 8/8
3	2	3	0	2	2	1	0

1. Create a line plot to represent the data below. Make sure to include title and label the line.

Number of Crayons in Mark's



Length of Crayons in Inches

2. What is the total length of the crayons that he sorted, if they were connected from end to end?

$\left(\frac{9}{8}\times 3\right)+\left(\frac{10}{8}\times 2\right)+\left(\frac{11}{8}\times 3\right)+\left(\frac{13}{8}\times 2\right)+\frac{14}{8}+\frac{15}{8}=$

27/8 + 20/8 + 33/8 + 26/8 + 29/8 = 135/8 = $16\frac{7}{8}$ inches

3. What is the length of pencils that is left over?

$19\frac{1}{2} - 16\frac{7}{8} = 19\frac{4}{8} - 16\frac{7}{8} = 19\frac{4}{8} - 16\frac{7}{8} = 18\frac{12}{8} - 16\frac{7}{8} = 2\frac{5}{8}$ inches are crayons are left

4. Based on the crayons that Marvin sorted, what will be the length of a typical pencil if the crayons were cut into pieces of equal length?

$= \frac{135}{8} \div 13 = \frac{135}{8} \times \frac{1}{13} = \frac{135}{104} = 1\frac{31}{104}$ inches per pencil

5. What is the length of the crayons sorted that are at least ½ inch long?

$(\frac{5}{8} \times 2) + (\frac{6}{8} \times 2) + \frac{7}{8} = \frac{29}{8} = 3\frac{5}{8}$ inches