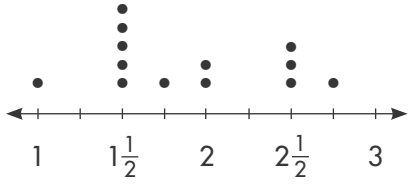
Name _____

Topic **10**
Assessment

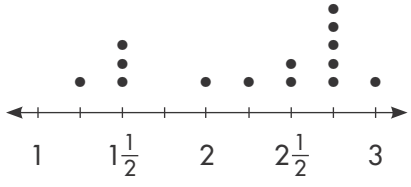
1. Which line plot shows the data? **1 point**

1	$2\frac{1}{2}$	$1\frac{1}{4}$	$2\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$	$2\frac{1}{2}$
$1\frac{1}{4}$	2	$1\frac{1}{2}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$2\frac{1}{2}$

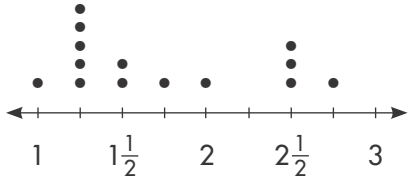
Ⓐ



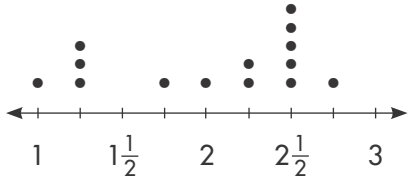
Ⓑ



Ⓒ

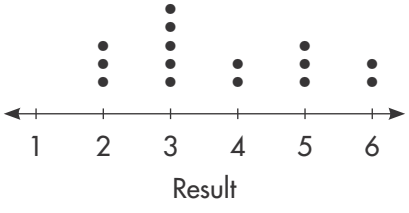


Ⓓ



2. The line plot shows the results from an experiment in which a number cube was rolled fifteen times. How many times did the number cube land on 3? **1 point**

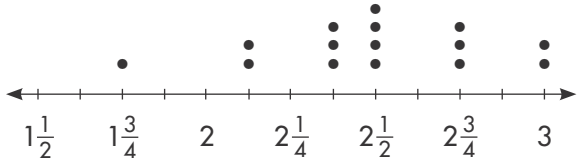
Results of Rolling a Number Cube



5 times

3. Emilia made a line plot to record the data for a science experiment in which she measured the lengths of 15 earthworms.

Lengths of Earthworms (inches)



A. What is the difference in length between the longest and shortest earthworms? **1 point**

$1\frac{1}{4}$ inches

B. What is the most common length for the earthworms measured in the experiment? **1 point**

$2\frac{1}{2}$ inches

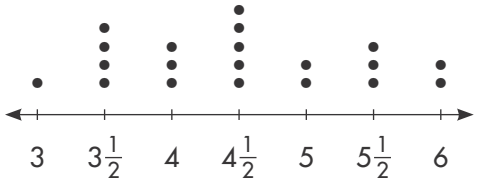
C. What is the total length of all the earthworms Emilia measured? Write and solve an equation to show your work. **2 points**

$37\frac{3}{8}$ inches;

$$1\frac{3}{4} + \left(2 \times 2\frac{1}{8}\right) + \left(3 \times 2\frac{3}{8}\right) + \left(4 \times 2\frac{1}{2}\right) + \left(3 \times 2\frac{3}{4}\right) + (2 \times 3) = 37\frac{3}{8}$$

Shiro and Tatiana weighed some pebbles in science class. They made a line plot to display their data. Use the line plot to answer **4–6**.

Weights of Pebbles (ounces)



4. Of the pebbles that were measured, which weight occurs the least? **1 point**

- (A) 3 ounces
- (B) 4 ounces
- (C) $4\frac{1}{2}$ ounces
- (D) $5\frac{1}{2}$ ounces

5. What is the total weight of the pebbles represented by the data? **1 point**

- (A) $73\frac{1}{2}$ ounces
- (B) 84 ounces
- (C) $85\frac{1}{2}$ ounces
- (D) 90 ounces

6 Suppose 2 more pebbles are weighed and each weighs $3\frac{1}{2}$ ounces. Would the value that occurred most often change? Explain your reasoning. **2 points**

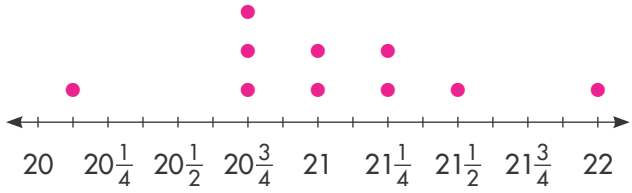
Yes; Sample answer: Now $3\frac{1}{2}$ occurs 6 times and $4\frac{1}{2}$ occurs 5 times. So, $3\frac{1}{2}$ would be the most common weight.

7. Lewis recorded the number of minutes it took him to walk to school every day for two weeks.

$20\frac{3}{4}$	$21\frac{1}{4}$	22	$20\frac{1}{8}$	$20\frac{3}{4}$
21	$21\frac{1}{4}$	$20\frac{3}{4}$	21	$21\frac{1}{2}$

A. Make a line plot of the data set. **1 point**

Walking Times to School (minutes)



B. Lewis said that the difference between his fastest time and his slowest time was 2 minutes. Do you agree with Lewis? Explain. **2 points**

No; The difference is $1\frac{7}{8}$ minutes; $22 - 20\frac{1}{8} = 21\frac{8}{8} - 20\frac{1}{8} = 1\frac{7}{8}$

C. What was the total time that Lewis spent walking to school in the past two weeks? Show your work. **2 points**

$210\frac{3}{8}$ minutes;
$20\frac{1}{8} + \left(3 \times 20\frac{3}{4}\right) + (2 \times 21) + \left(2 \times 21\frac{1}{4}\right) + 21\frac{1}{2} + 22 = 210\frac{3}{8}$

