

Grade 4 · Line Plots with Fractions · Test

Common Core 4.MD.B.4 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

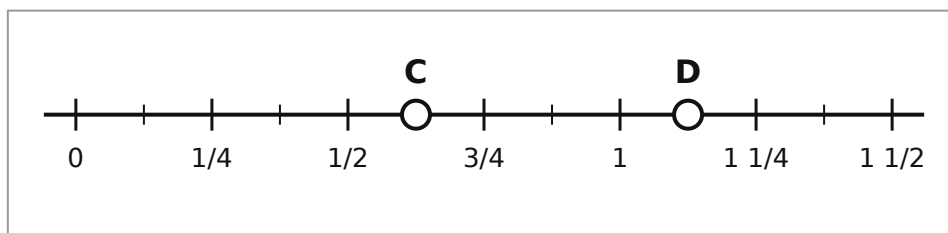
This test checks standard 4.MD.B.4. Read each number line carefully, show your work for the longer problems, and write answers as simplified fractions or mixed numbers. The test has 9 questions worth 20 points in all. Allow 45 minutes.

Test information

- **Grade:** Grade 4
- **Chapter:** Line Plots with Fractions
- **Common Core:** 4.MD.B.4
- **Time:** 45 minutes
- **Total:** 20 points (Question 1: 2 pts; Question 2: 2 pts; Question 3: 2 pts; Question 4: 3 pts; Question 5: 2 pts; Question 6: 2 pts; Question 7: 3 pts; Question 8: 2 pts; Question 9: 2 pts)

Question 1: Reading a number line (2 points)

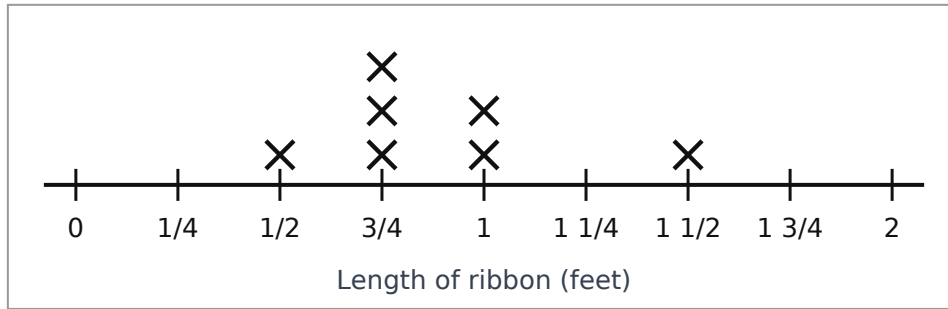
Write the fraction or mixed number for each point.



- Point C (1 point)
- Point D (1 point)

Question 2: Reading a line plot (2 points)

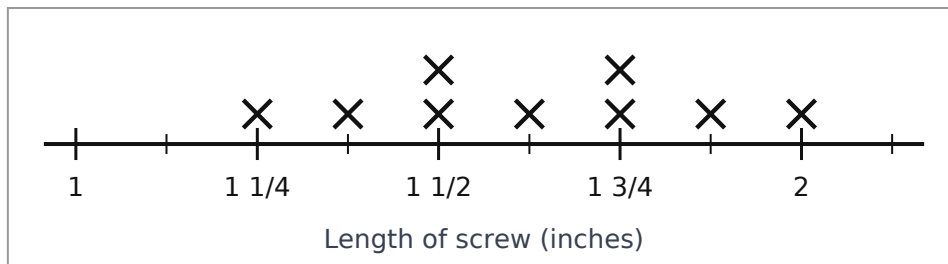
Use the line plot of ribbon lengths.



- Count the ribbons that are 1 ft long. (1 point)
- Name the length that appears most often. (1 point)

Question 3: Counting and comparing (2 points)

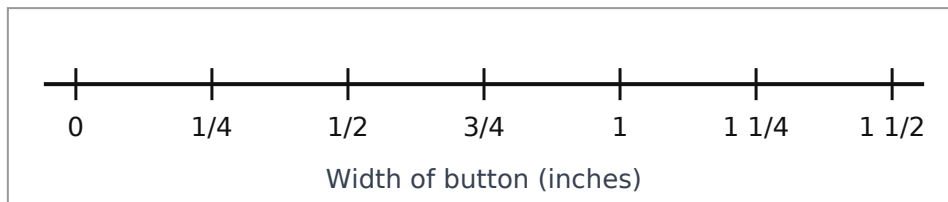
Use the line plot of screw lengths.



- Count the screws that were measured. (1 point)
- Count the screws that are longer than $1\frac{1}{4}$ in. (1 point)

Question 4: Make a line plot (3 points)

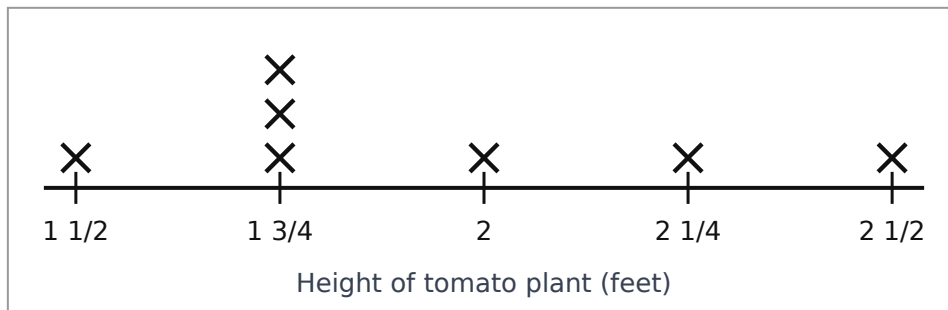
Use the widths of 8 buttons that Priya measured, in inches: $\frac{1}{2}$, $\frac{3}{4}$, $\frac{3}{4}$, 1, 1, 1, $1\frac{1}{4}$, $1\frac{1}{2}$.



- Copy the number line and make a line plot of the data. (2 points)
- Count the buttons that are wider than $\frac{1}{2}$ in. (1 point)

Question 5: Subtracting from a plot (2 points)

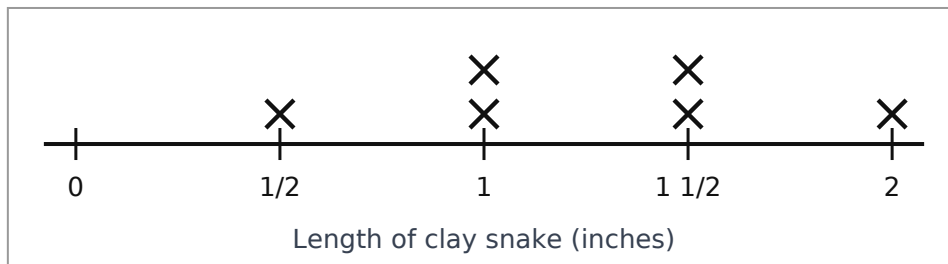
Use the line plot of tomato plant heights.



- Find how much taller the tallest plant is than the shortest plant. (1 point)
- Find how much taller the tallest plant is than the most common height. (1 point)

Question 6: Adding from a plot (2 points)

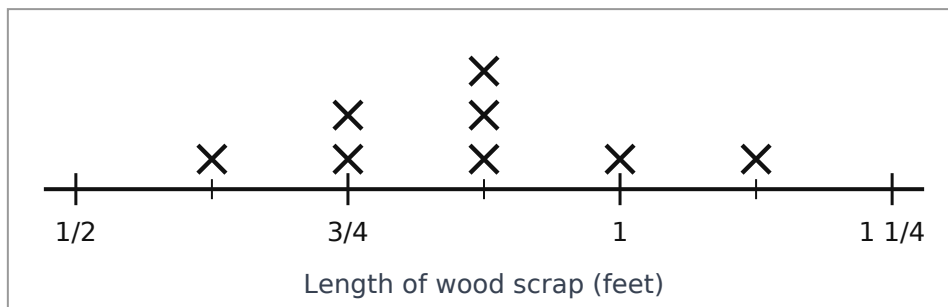
Use the line plot of the clay snakes Liam rolled.



- Find the total length of the longest and the shortest snake. (1 point)
- Find the total length of the two snakes that are $1\frac{1}{2}$ in. long and one snake that is 1 inch long. (1 point)

Question 7: Total length (3 points)

Find the total length of all the wood scraps Ethan has, shown on the line plot. Write the answer as a mixed number.



Question 8: Find the mistake (2 points)

Explain Maya's mistake (1 point) and find the correct difference (1 point). Maya subtracted

$5\frac{1}{4} - 2\frac{3}{4}$ and wrote $3\frac{2}{4}$.

Question 9: Multi-step problem (2 points)

Find how much longer the longer ribbon is than the other ribbon after the cut. Sofia measures two ribbons: one is $3\frac{1}{4}$ in. long and the other is $2\frac{1}{4}$ in. long. She cuts $\frac{3}{4}$ in. from the longer ribbon.