

Grade 4 - Line Plots with Fractions - Test Answer Key

Common Core 4.MD.B.4 · maths-pdf.fr/en/

Use this answer key to score the test out of 20 points. Each solution shows the correct plot reading and fraction work. The scoring note explains where to award partial credit for correct steps.

Grade 4 · Common Core State Standards: **4.MD.B.4**

Question 1 - Reading a line plot [2 pts]

- a. $1+3+2+2=8$ pencils
- b. Longer than $\frac{1}{2}$ inch: $2+2=4$ pencils

Scoring: 1 point for each correct answer.

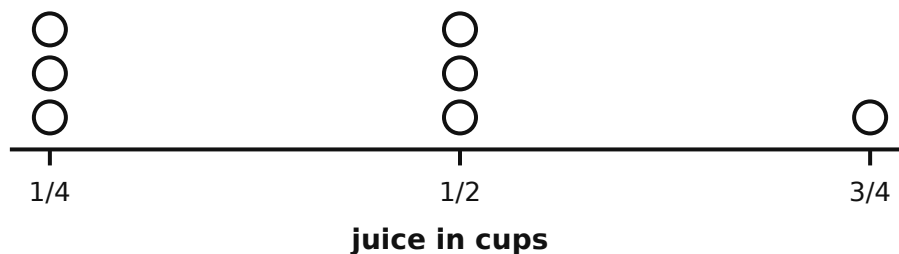
Question 2 - Longest and shortest [2 pts]

- a. The tallest stack has 3 dots: $\frac{1}{2}$ inch
- b. $1-\frac{1}{4}=\frac{3}{4}$ inch

Scoring: 1 point for the most common length, 1 point for the correct difference.

Question 3 - Make a line plot [2 pts]

$\frac{1}{4}$ cup appears 3 times, $\frac{1}{2}$ cup appears 3 times, and $\frac{3}{4}$ cup appears 1 time.



Finished plot.

Scoring: 1 point for the correct counts at 1/4 and 1/2, 1 point for the count at 3/4 and a total of 7 dots.

Question 4 - Leaf lengths in eighths [3 pts]

- a. $\frac{3}{8} + \frac{3}{8} + \frac{3}{8} = \frac{9}{8} = 1\frac{1}{8}$ inches
- b. $2 + 1 + 3 = 6$ leaves
- c. $\frac{4}{8} - \frac{1}{8} = \frac{3}{8}$ inch

Scoring: 1 point for each correct part.

Question 5 - Plant heights in halves [3 pts]

- a. $3 + 1 + 2 = 6$ plants
- b. $1\frac{1}{2} + 1\frac{1}{2} + 1\frac{1}{2} = 4\frac{1}{2}$ feet
- c. $2\frac{1}{2} - 1 = 1\frac{1}{2}$ feet

Scoring: 1 point for each correct part.

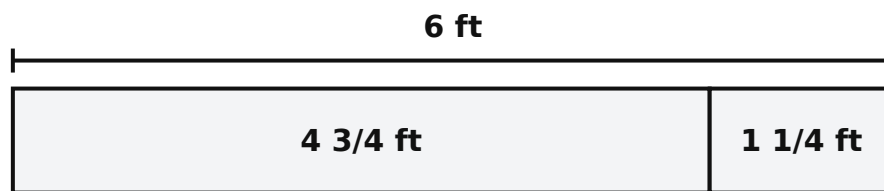
Question 6 - Rainfall total [3 pts]

- a. In fourths: $\frac{1}{4} + \frac{2}{4} + \frac{1}{4} + \frac{3}{4} + \frac{2}{4} + \frac{1}{4} = \frac{10}{4} = 2\frac{2}{4} = 2\frac{1}{2}$ inches
- b. $\frac{3}{4} - \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$ inch

Scoring: part a, 1 point for adding the six measurements correctly as fractions and 1 point for the answer in simplest form. Part b, 1 point.

Question 7 - Ribbon pieces [3 pts]

- a. In fourths: 3 pieces of 1/4 make 3/4; 1 piece of 2/4 makes 2/4; 2 pieces of 3/4 make 6/4; 2 pieces of 4/4 make 8/4. Total $\frac{3}{4} + \frac{2}{4} + \frac{6}{4} + \frac{8}{4} = \frac{19}{4} = 4\frac{3}{4}$ feet
- b. $6 - 4\frac{3}{4} = 5\frac{4}{4} - 4\frac{3}{4} = 1\frac{1}{4}$ feet



6 ft in all.

Scoring: part a, 1 point for converting every dot to fourths and 1 point for the correct total.
Part b, 1 point.

Question 8 - Two columns [2 pts]

3 dots at $\frac{1}{2}$: $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 1\frac{1}{2}$. 2 dots at 1: 2.

$$1\frac{1}{2} + 2 = 3\frac{1}{2} \text{ feet.}$$

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

Scoring: 1 point for the total of the three half-foot dots, 1 point for the final total.

Total
20 points