

Grade 5 - Line Plots and Data - Test Answer Key

Common Core 5.MD.B.2 · maths-pdf.fr/en/

Use this key to score the test out of 20 points. Each solution shows the work and a scoring guide. Give partial credit when the method is right but a single fraction operation is wrong.

Grade 5 · Common Core State Standards: **5.MD.B.2**

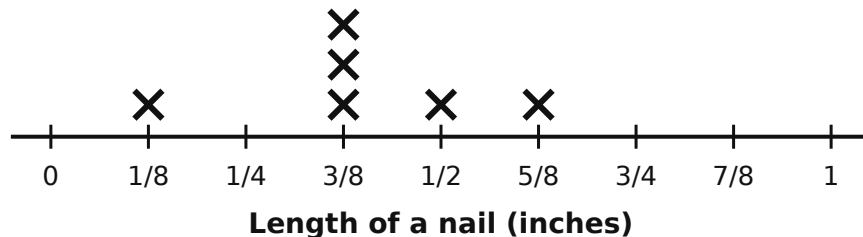
Question 1 - Pieces of wire [3 pts]

- a. $3 + 1 = 4$ pieces
- b. $1 - \frac{1}{4} = \frac{3}{4}$ inch
- c. $2 \times \frac{1}{4} + 4 \times \frac{1}{2} + 3 \times \frac{3}{4} + 1 = \frac{1}{2} + 2 + \frac{9}{4} + 1 = 5\frac{3}{4}$ inches

Scoring: 1 point per part.

Question 2 - Plot the nails [2 pts]

- a. Place 1 X above $\frac{1}{8}$, 3 above $\frac{3}{8}$, 1 above $\frac{1}{2}$ and 1 above $\frac{5}{8}$.



Line plot. Each X is one measurement. Label: Length of a nail (inches).

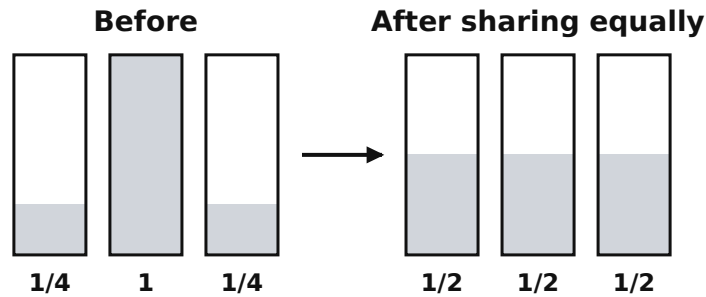
- b. Nails longer than $\frac{1}{4}$ inch: $3 + 1 + 1 = 5$ nails.

Scoring: 1 point for a correct plot (6 X's in the right places), 1 point for 5 nails.

Question 3 - Bags of flour [2 pts]

Total: $\frac{1}{4} + 1 + \frac{1}{4} = 1\frac{1}{2}$ pounds.

$$1\frac{1}{2} \div 3 = \frac{3}{2} \div 3 = \frac{1}{2}.$$



Each tall box holds 1 pound when full.

$\frac{1}{2}$ pound

Scoring: 1 point for the total, 1 point for dividing to get $\frac{1}{2}$ pound.

Question 4 - Cans of paint [3 pts]

- a. $2 + 3 = 5$ cans
- b. $2 \times \frac{1}{4} + 3 \times \frac{1}{2} + \frac{3}{4} + 2 \times 1 = \frac{1}{2} + \frac{3}{2} + \frac{3}{4} + 2 = 4\frac{3}{4}$ gallons
- c. $8 - 4\frac{3}{4} = 3\frac{1}{4}$ gallons

Scoring: 1 point per part.

Question 5 - Two bottles [2 pts]

Total: $\frac{5}{8} + \frac{7}{8} = \frac{12}{8} = \frac{3}{2}$ gallons.

$$\frac{3}{2} \div 2 = \frac{3}{4}$$

$\frac{3}{4}$ gallon

Scoring: 1 point for the total, 1 point for the equal share.

Question 6 - Lengths of rope [2 pts]

- a. $3 + 2 + 1 = 6$ ropes
- b. $3 \times \frac{1}{2} + 2 \times \frac{5}{8} = \frac{12}{8} + \frac{10}{8} = \frac{22}{8} = 2\frac{3}{4}$ yards

Scoring: 1 point per part.

Question 7 - Running log [2 pts]

Total: $\frac{2}{4} + \frac{3}{4} + \frac{2}{4} + \frac{5}{4} = \frac{12}{4} = 3$ miles.

$3 \div 4 = \frac{3}{4}$ mile each day.

3 miles; $\frac{3}{4}$ mile per day

Scoring: 1 point for the total, 1 point for the equal share.

Question 8 - Rain gauge [2 pts]

Total: $\frac{3}{8} + \frac{5}{8} + \frac{2}{8} + \frac{4}{8} = \frac{14}{8} = 1\frac{3}{4}$ inches.

$3 - 1\frac{3}{4} = 1\frac{1}{4}$.

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

Scoring: 1 point for the total, 1 point for the difference.

Question 9 - Who has more [2 pts]

Ethan: $4 \times \frac{1}{4} = 1$. Maya: $2 \times \frac{3}{4} = \frac{6}{4} = 1\frac{1}{2}$.

Maya's total is greater, by $\frac{1}{2}$

Scoring: 1 point for each correct total, shown with the comparison.

Total
20 points