

Grade 4 · Line Plots with Fractions · Quiz

Common Core 4.MD.B.4 · mathovore.fr

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

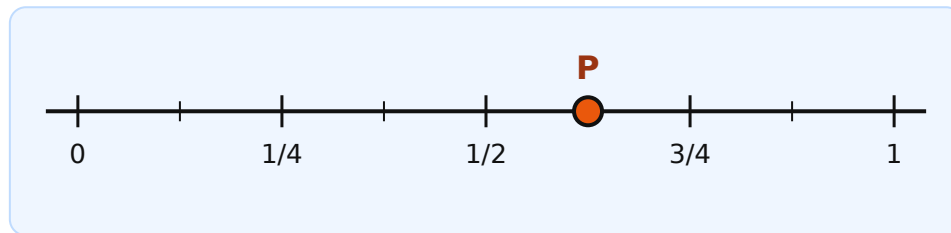
Answer these 10 multiple-choice questions on line plots with fractions (4.MD.B.4). Read each number line carefully, then choose the one correct answer. Check your choice by counting marks or by adding and subtracting the fractions again.

Grade 4 Common Core: 4.MD.B.4

Questions

Question 1

Which fraction names point P?

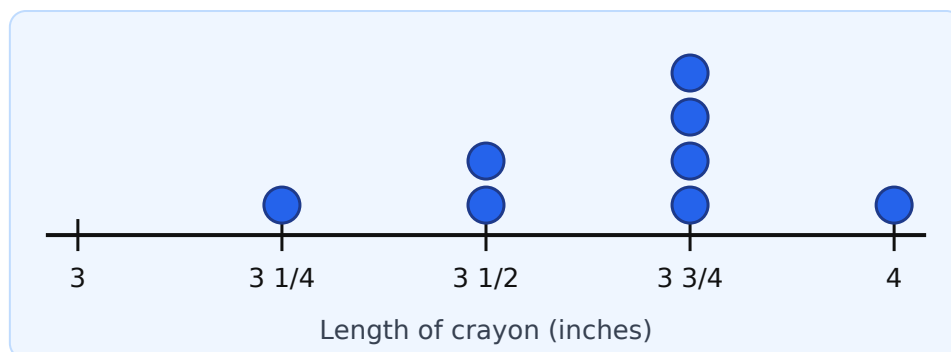


Point P.

- A. $1\frac{1}{4}$
- B. $\frac{5}{8}$
- C. $\frac{3}{4}$
- D. $\frac{1}{2}$

Question 2

How many crayons are $3\frac{1}{2}$ in. long?

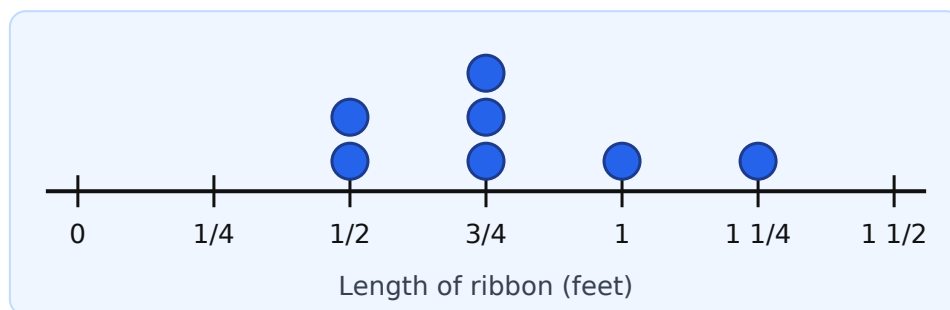


Crayon lengths.

- A. 1
- B. 3
- C. 2
- D. 4

Question 3

Which length has the most marks?

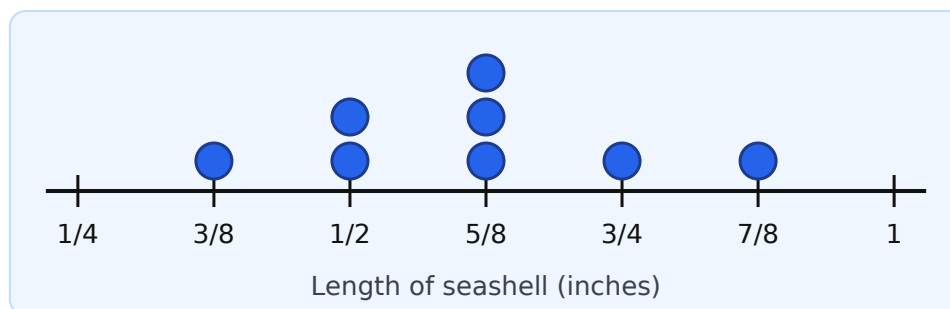


Ribbon lengths.

- A. $\frac{3}{4}$ ft
- B. $\frac{1}{2}$ ft
- C. 1 ft
- D. $1\frac{1}{4}$ ft

Question 4

How much longer is the longest shell than the shortest shell?

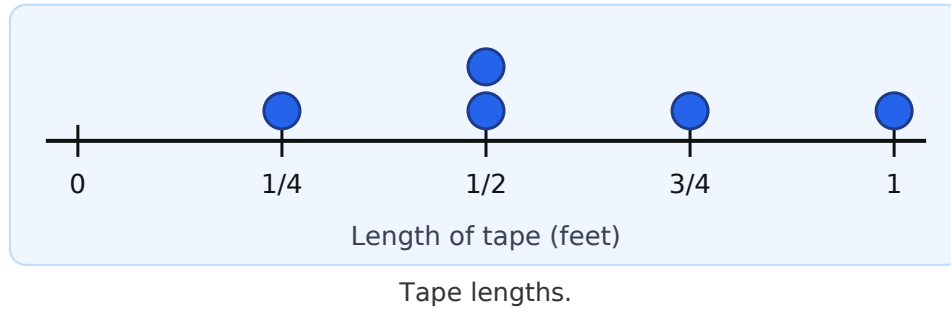


Seashell lengths.

- A. $\frac{1}{4}$ in.
- B. $\frac{3}{4}$ in.
- C. $\frac{1}{2}$ in.
- D. $\frac{1}{8}$ in.

Question 5

How many pieces of tape are on the line plot?



- A. 4
- B. 6
- C. 3
- D. 5

Question 6

Which spacing for the tick marks shows $1\frac{3}{4}$, $1\frac{1}{4}$ exactly with the fewest tick marks?

- A. Halves
- B. Fourths
- C. Wholes
- D. Thirds

Question 7

Three pieces of rope are each $\frac{3}{4}$ ft long. What is the total length?

- A. $\frac{3}{4}$ ft
- B. $2\frac{1}{4}$ ft
- C. $\frac{9}{12}$ ft
- D. $1\frac{1}{2}$ ft

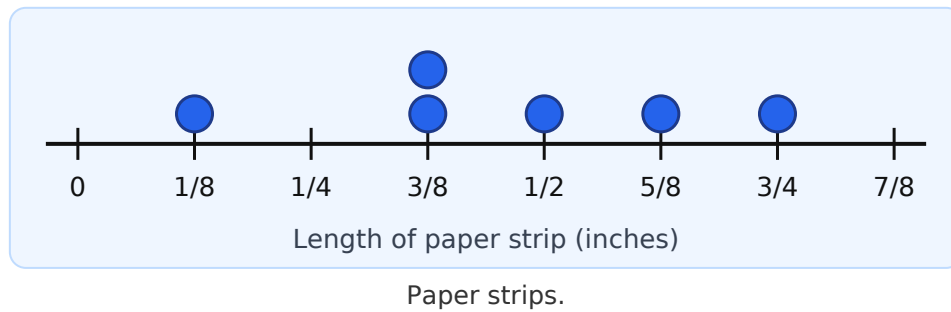
Question 8

What is $3 - 1\frac{1}{4}$?

- A. $1\frac{3}{4}$
- B. $2\frac{3}{4}$
- C. $1\frac{1}{4}$
- D. $2\frac{1}{4}$

Question 9

What is the total length of all the paper strips?



- A. $2\frac{3}{4}$ in.
- B. $1\frac{3}{8}$ in.
- C. $2\frac{5}{8}$ in.
- D. $2\frac{1}{4}$ in.

Question 10

A board is 2 ft long. Maya cuts off $\frac{5}{8}$ ft. How much is left?

- A. $\frac{3}{8}$ ft
- B. $1\frac{5}{8}$ ft
- C. $\frac{7}{8}$ ft
- D. $1\frac{3}{8}$ ft

Answer key

1. **C** - Point P is 5 steps from 0, and each step is $\frac{1}{8}$. A common mistake is to count the labeled marks instead of every tick mark.
2. **C** - Two dots are above $3\frac{1}{2}$ (the mark between $3\frac{1}{4}$ and $3\frac{3}{4}$). The tallest stack, 4 dots, is at $3\frac{3}{4}$.
3. **A** - The tallest stack has 3 marks and it is above $\frac{3}{4}$. Do not confuse the largest value with the most common value.
4. **C** - The longest shell is $\frac{7}{8}$ in. and the shortest is $\frac{3}{8}$ in. Subtract: $\frac{7}{8} - \frac{3}{8} = \frac{4}{8} = \frac{1}{2}$.
5. **D** - Count every dot: $1 + 2 + 1 + 1 = 5$. A common mistake is to count only the number of different lengths, which is 4.
6. **B** - Each value is a multiple of $\frac{1}{4}$, and $\frac{3}{4}$ is not a multiple of $\frac{1}{2}$, so halves cannot show every value.
7. **B** - $\frac{3}{4} + \frac{3}{4} + \frac{3}{4} = \frac{9}{4} = 2\frac{1}{4}$. Adding the denominators is a common mistake.
8. **A** - Write 3 as $2\frac{4}{4}$, then subtract: $2\frac{4}{4} - 1\frac{1}{4} = 1\frac{3}{4}$.
9. **A** - In eighths: $1 + 3 + 3 + 4 + 5 + 6 = 22$, so the total is $\frac{22}{8} = 2\frac{3}{4}$. Check each stack before adding.
10. **D** - Write 2 as $1\frac{8}{8}$, then $1\frac{8}{8} - \frac{5}{8} = 1\frac{3}{8}$. Answer: $1\frac{3}{8}$ feet.

Remember:

- Each mark on a line plot stands for one measurement.
- Halves, fourths, and eighths split each inch into 2, 4, or 8 equal parts.
- The tallest stack of marks shows the most common value.
- To find how much longer, subtract the smaller value from the larger value.
- To find a total, add every value after writing them as fractions with the same denominator.