



# Line Plots with Fractions

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Grade: Grade 5

## Part A: Multiple Choice

Circle the best answer for each question.

1. A line plot shows water in bottles (liters):  $\frac{1}{8} \rightarrow 3$  Xs,  $\frac{1}{4} \rightarrow 5$  Xs,  $\frac{3}{8} \rightarrow 4$  Xs,  $\frac{1}{2} \rightarrow 2$  Xs. What is the total water in all bottles?

- A)  $4 \frac{3}{8}$  liters
- B)  $4 \frac{1}{8}$  liters
- C)  $3 \frac{7}{8}$  liters
- D) 14 liters

2. A line plot shows miles walked:  $\frac{1}{4} \rightarrow 2$  Xs,  $\frac{1}{2} \rightarrow 6$  Xs,  $\frac{3}{4} \rightarrow 4$  Xs,  $1 \rightarrow 3$  Xs. If the 2 students who walked  $\frac{1}{4}$  mile each walk an extra  $\frac{1}{4}$  mile, what is the new total miles walked by all students?

- A)  $10 \frac{1}{2}$  miles
- B)  $9 \frac{3}{4}$  miles
- C) 10 miles
- D) 11 miles

3. A line plot shows worm lengths in inches:  $\frac{1}{4} \rightarrow 4$  Xs,  $\frac{1}{2} \rightarrow 3$  Xs,  $\frac{3}{4} \rightarrow 5$  Xs,  $1 \rightarrow 2$  Xs. How much longer is the total of all  $\frac{3}{4}$ -inch worms than the total of all  $\frac{1}{2}$ -inch worms?

- A)  $2 \frac{1}{4}$  inches
- B)  $1 \frac{1}{4}$  inches
- C) 2 inches
- D)  $2 \frac{1}{2}$  inches

4. A line plot shows flour used in cups:  $\frac{1}{8} \rightarrow 2$  Xs,  $\frac{1}{4} \rightarrow 3$  Xs,  $\frac{3}{8} \rightarrow 5$  Xs,  $\frac{1}{2} \rightarrow 4$  Xs. A baker needs 5 cups total. How much more flour is needed beyond the recipes?

- A)  $\frac{3}{8}$  cup
- B)  $\frac{5}{8}$  cup
- C)  $\frac{1}{8}$  cup
- D)  $\frac{7}{8}$  cup

## Part B: Fill in the Blank

Write the correct answer on each line.

1. A line plot shows homework time in hours:  $\frac{1}{4} \rightarrow 3$  Xs,  $\frac{1}{2} \rightarrow 7$  Xs,  $\frac{3}{4} \rightarrow 4$  Xs,  $1 \rightarrow 2$  Xs. Total homework time for all 16 students (write as a mixed number): \_\_\_\_\_ hours.

2. Using the homework data, the average time per student equals \_\_\_\_\_ hour. (Write as a fraction.)

3. A line plot shows fish weights in pounds:  $\frac{1}{4} \rightarrow 4$  Xs,  $\frac{1}{2} \rightarrow 2$  Xs,  $\frac{3}{4} \rightarrow 6$  Xs,  $1 \rightarrow 1$  X. Total weight of fish weighing  $\frac{1}{2}$  pound or more (write as a mixed number): \_\_\_\_\_ pounds.

4. Using the fish data, the difference between the total weight of the  $\frac{3}{4}$ -pound fish and the total weight of

**Part A: Multiple Choice**

Circle the best answer for each question.

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| <p><b>1.</b> A line plot shows water in bottles (liters): <math>\frac{1}{8} \rightarrow 3</math> Xs, <math>\frac{1}{4} \rightarrow 5</math> Xs, <math>\frac{3}{8} \rightarrow 4</math> Xs, <math>\frac{1}{2} \rightarrow 2</math> Xs. What is the total water in all bottles?</p> <p><input type="radio"/> A) <math>4 \frac{3}{8}</math> liters</p> <p><input checked="" type="radio"/> <b>B) <math>4 \frac{1}{8}</math> liters</b></p> <p><input type="radio"/> C) <math>3 \frac{7}{8}</math> liters</p> <p><input type="radio"/> D) 14 liters</p>  | <p><b>2.</b> A line plot shows miles walked: <math>\frac{1}{4} \rightarrow 2</math> Xs, <math>\frac{1}{2} \rightarrow 6</math> Xs, <math>\frac{3}{4} \rightarrow 4</math> Xs, <math>1 \rightarrow 3</math> Xs. If the 2 students who walked <math>\frac{1}{4}</math> mile each walk an extra <math>\frac{1}{4}</math> mile, what is the new total miles walked by all students?</p> <p><input type="radio"/> A) <math>10 \frac{1}{2}</math> miles</p> <p><input type="radio"/> B) <math>9 \frac{3}{4}</math> miles</p> <p><input checked="" type="radio"/> <b>C) 10 miles</b></p> <p><input type="radio"/> D) 11 miles</p> |
| <p><b>3.</b> A line plot shows worm lengths in inches: <math>\frac{1}{4} \rightarrow 4</math> Xs, <math>\frac{1}{2} \rightarrow 3</math> Xs, <math>\frac{3}{4} \rightarrow 5</math> Xs, <math>1 \rightarrow 2</math> Xs. How much longer is the total of all <math>\frac{3}{4}</math>-inch worms than the total of all <math>\frac{1}{2}</math>-inch worms?</p> <p><input checked="" type="radio"/> <b>A) <math>2 \frac{1}{4}</math> inches</b></p> <p><input type="radio"/> B) <math>1 \frac{1}{4}</math> inches</p> <p><input type="radio"/> C) 2 inches</p> <p><input type="radio"/> D) <math>2 \frac{1}{2}</math> inches</p> | <p><b>4.</b> A line plot shows flour used in cups: <math>\frac{1}{8} \rightarrow 2</math> Xs, <math>\frac{1}{4} \rightarrow 3</math> Xs, <math>\frac{3}{8} \rightarrow 5</math> Xs, <math>\frac{1}{2} \rightarrow 4</math> Xs. A baker needs 5 cups total. How much more flour is needed beyond the recipes?</p> <p><input type="radio"/> A) <math>\frac{3}{8}</math> cup</p> <p><input type="radio"/> B) <math>\frac{5}{8}</math> cup</p> <p><input checked="" type="radio"/> <b>C) <math>\frac{1}{8}</math> cup</b></p> <p><input type="radio"/> D) <math>\frac{7}{8}</math> cup</p>                                     |

**Part B: Fill in the Blank**

Write the correct answer on each line.

- A line plot shows homework time in hours:  $\frac{1}{4} \rightarrow 3$  Xs,  $\frac{1}{2} \rightarrow 7$  Xs,  $\frac{3}{4} \rightarrow 4$  Xs,  $1 \rightarrow 2$  Xs. Total homework time for all 16 students (write as a mixed number):  $9 \frac{1}{4}$  hours.
- Using the homework data, the average time per student equals  $\frac{37}{64}$  hour. (Write as a fraction.)
- A line plot shows fish weights in pounds:  $\frac{1}{4} \rightarrow 4$  Xs,  $\frac{1}{2} \rightarrow 2$  Xs,  $\frac{3}{4} \rightarrow 6$  Xs,  $1 \rightarrow 1$  X. Total weight of fish weighing  $\frac{1}{2}$  pound or more (write as a mixed number):  $6 \frac{1}{2}$  pounds.
- Using the fish data, the difference between the total weight of the  $\frac{3}{4}$ -pound fish and the total weight of the  $\frac{1}{4}$ -pound fish is  $3 \frac{1}{2}$  pounds.