Line Plots with Fractions

Name: _____ Date: _____ Grade: Grade 5

Part A: Multiple Choice

Circle the best answer for each question.

1. A gardener records seedling growth in inches: $\frac{1}{8}$→3 Xs, $\frac{1}{4}$→5 Xs, $\frac{3}{8}$→4 Xs, $\frac{1}{2}$→2 Xs. What is the total growth of all seedlings?

- ○ A) $3\ \frac{7}{8}$ inches
- ○ B) $4\ \frac{1}{8}$ inches
- ○ C) $3\ \frac{5}{8}$ inches
- ○ D) 4 inches

2. A chef measures leftover sauce in cups: $\frac{1}{4}$→6 Xs, $\frac{1}{2}$→4 Xs, $\frac{3}{4}$→2 Xs. She combines all sauce (total = 5 cups) and uses 3 cups. How much sauce remains?

- ○ A) 2 cups
- ○ B) 1 cup
- ○ C) $1\ \frac{1}{2}$ cups
- ○ D) $\frac{1}{2}$ cup

3. Students tracked rainfall over 15 days: 0→3 Xs, $\frac{1}{4}$→4 Xs, $\frac{1}{2}$→5 Xs, $\frac{3}{4}$→2 Xs, 1→1 X. What fraction of the 15 days had $\frac{1}{2}$ inch or more of rain?

- ○ A) $\frac{8}{15}$
- ○ B) $\frac{7}{15}$
- ○ C) $\frac{5}{15}$
- ○ D) $\frac{1}{3}$

4. A line plot shows ribbon per gift in yards: $\frac{1}{4}$→3 Xs, $\frac{1}{2}$→5 Xs, $\frac{3}{4}$→4 Xs, 1→2 Xs. Total = $8\ \frac{1}{4}$ yards. Ribbon is sold in 5-yard rolls. How many complete rolls are needed?

- ○ A) 1 roll
- ○ B) 3 rolls
- ○ C) 2 rolls
- ○ D) 4 rolls

Part B: Fill in the Blank

Write the correct answer on each line.

1. A line plot shows test times in hours: $\frac{1}{4}$→4 Xs, $\frac{1}{2}$→8 Xs, $\frac{3}{4}$→6 Xs, 1→2 Xs. Total time for all 20 students (write as a mixed number): _____ hours.

2. Using the test time data, the number of students who took less than $\frac{3}{4}$ hour is _____.

3. A line plot shows bread weights in pounds: $\frac{3}{8}$→3 Xs, $\frac{1}{2}$→5 Xs, $\frac{5}{8}$→4 Xs, $\frac{3}{4}$→2 Xs. Total weight of $\frac{5}{8}$-pound loaves (write as a mixed number): _____ pounds.

4. Using the bread data, total weight of ALL loaves combined (write as a fraction): _____.

Answer Key · Line Plots with Fractions · Grade: Grade 5

Part A: Multiple Choice

Circle the best answer for each question.

1. A gardener records seedling growth in inches: $\frac{1}{8}$→3 Xs, $\frac{1}{4}$→5 Xs, $\frac{3}{8}$→4 Xs, $\frac{1}{2}$→2 Xs. What is the total growth of all seedlings?

- ○ A) $3\frac{7}{8}$ inches
- ● **B) $4\frac{1}{8}$ inches**
- ○ C) $3\frac{5}{8}$ inches
- ○ D) 4 inches

2. A chef measures leftover sauce in cups: $\frac{1}{4}$→6 Xs, $\frac{1}{2}$→4 Xs, $\frac{3}{4}$→2 Xs. She combines all sauce (total = 5 cups) and uses 3 cups. How much sauce remains?

- ● **A) 2 cups**
- ○ B) 1 cup
- ○ C) $1\frac{1}{2}$ cups
- ○ D) $\frac{1}{2}$ cup

3. Students tracked rainfall over 15 days: 0→3 Xs, $\frac{1}{4}$→4 Xs, $\frac{1}{2}$→5 Xs, $\frac{3}{4}$→2 Xs, 1→1 X. What fraction of the 15 days had $\frac{1}{2}$ inch or more of rain?

- ● **A) $\frac{8}{15}$**
- ○ B) $\frac{7}{15}$
- ○ C) $\frac{5}{15}$
- ○ D) $\frac{1}{3}$

4. A line plot shows ribbon per gift in yards: $\frac{1}{4}$→3 Xs, $\frac{1}{2}$→5 Xs, $\frac{3}{4}$→4 Xs, 1→2 Xs. Total = $8\frac{1}{4}$ yards. Ribbon is sold in 5-yard rolls. How many complete rolls are needed?

- ○ A) 1 roll
- ○ B) 3 rolls
- ● **C) 2 rolls**
- ○ D) 4 rolls

Part B: Fill in the Blank

Write the correct answer on each line.

1. A line plot shows test times in hours: $\frac{1}{4}$→4 Xs, $\frac{1}{2}$→8 Xs, $\frac{3}{4}$→6 Xs, 1→2 Xs. Total time for all 20 students (write as a mixed number): **$11\frac{1}{2}$** hours.

2. Using the test time data, the number of students who took less than $\frac{3}{4}$ hour is **12**.

3. A line plot shows bread weights in pounds: $\frac{3}{8}$→3 Xs, $\frac{1}{2}$→5 Xs, $\frac{5}{8}$→4 Xs, $\frac{3}{4}$→2 Xs. Total weight of $\frac{5}{8}$-pound loaves (write as a mixed number): **$2\frac{1}{2}$** pounds.

4. Using the bread data, total weight of ALL loaves combined (write as a fraction): **$\frac{61}{8}$**.

5. A line plot shows how far students live from school in miles: $\frac{1}{4}$→5 Xs, $\frac{1}{2}$→3 Xs, $\frac{3}{4}$→4 Xs, 1→2 Xs. If