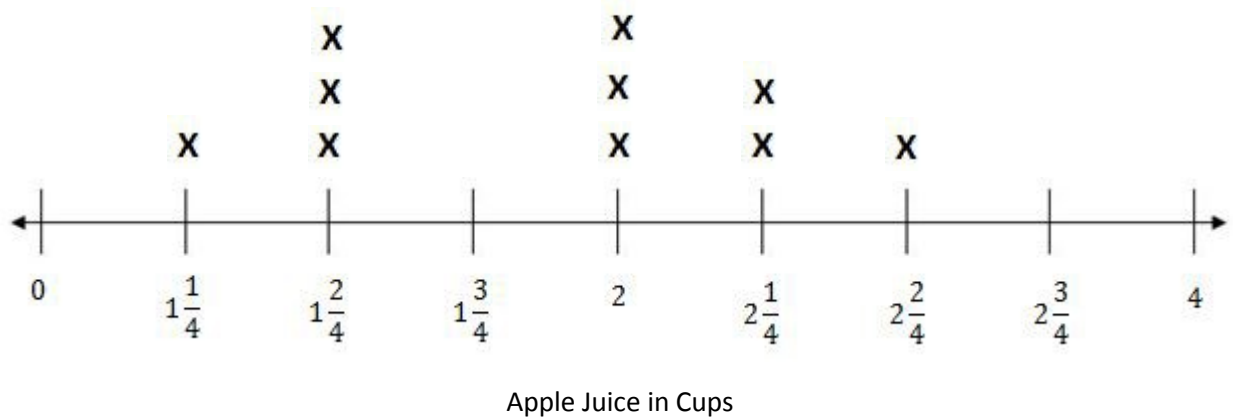


Name: \_\_\_\_\_ Date: \_\_\_\_\_

Petra had 21 cups of apple juice to serve her friends after a soccer practice. She distributed most of the apple juice as shown in the line plot below.

### Apple Juice Shared with Friends

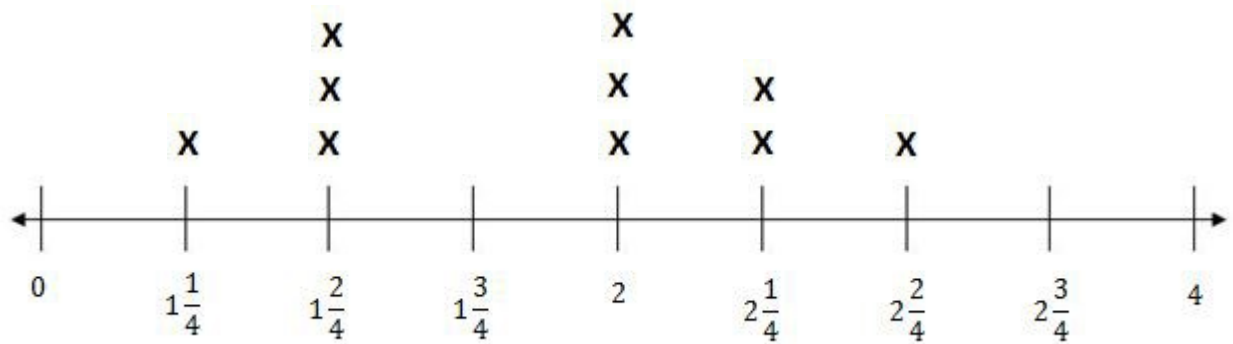


1. How much of the apple juice does she have remaining?
2. If the amount of apple juice that she shared was redistributed equally, how much apple juice would be in each cup?
3. How many of Petra's friends drank at least  $1\frac{1}{2}$  cups of apple juice, but no more than  $2\frac{1}{2}$  cups?
4. What is the difference between the most and the least amount of apple juice consumed?
5. How many times greater is the most amount of apple juice consumed compared to the least amount of apple juice consumed?

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

Petra had 21 cups of apple juice to serve her friends after a soccer practice. She distributed most of the apple juice as shown in the line plot below.

### Apple Juice Shared with Friends



Apple Juice in Cups

6. How much of the apple juice does she have remaining?

$$\begin{aligned} & \frac{1}{4} + \frac{2}{4} \times 3 + (2 \times 3) + (2\frac{1}{4} \times 2) + 2\frac{2}{4} \\ & = \frac{5}{4} + \frac{18}{4} + \frac{24}{4} + \frac{18}{4} + \frac{10}{4} = \frac{75}{4} = 18\frac{3}{4} = 21 - 18\frac{3}{4} = 2\frac{1}{4} \text{ cups remain} \end{aligned}$$

7. If the amount of apple juice that she shared was redistributed equally, how much apple juice would be in each cup?

$$\begin{aligned} & 18\frac{3}{4} \div 10 \\ & = \frac{75}{4} \times \frac{1}{10} = \frac{15}{4} \times \frac{1}{2} = \frac{15}{8} = 1\frac{7}{8} \text{ cups of juice each} \end{aligned}$$

8. How many of Petra's friends drank at least  $1\frac{1}{2}$  cups of apple juice, but no more than  $2\frac{1}{2}$  cups?

8

9. What is the difference between the most and the least amount of apple juice consumed?

$$2\frac{2}{4} - 1\frac{1}{4} = 2\frac{2}{4} - 1\frac{1}{4} = 1\frac{1}{4} \text{ cups more}$$

10. How many times greater is the most amount of apple juice consumed compared to the least amount of apple juice consumed?

$$2\frac{2}{4} \div 1\frac{1}{4} = \frac{10}{4} \div \frac{5}{4} = \frac{10}{4} \times \frac{4}{5} = \frac{10}{5} = 2 \text{ times greater.}$$