ALBERT

Name _____ Date _____

Line Plots with Fractions Worksheet

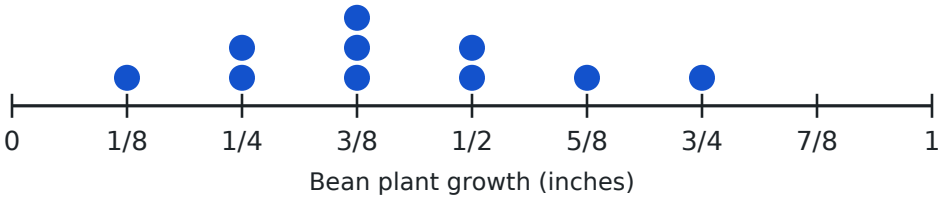
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> Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.

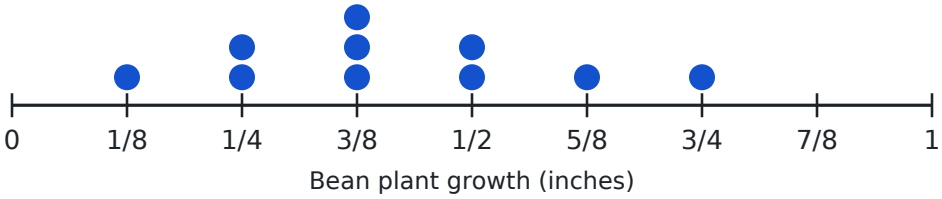
Practice

Builds the skill step by step.

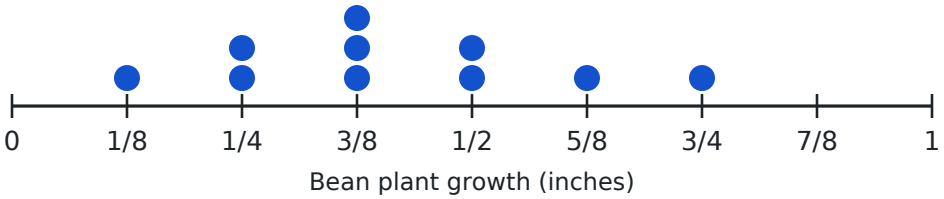
1. The line plot shows how much 10 bean plants grew in a week. How many plants grew exactly $\frac{1}{4}$ inch?



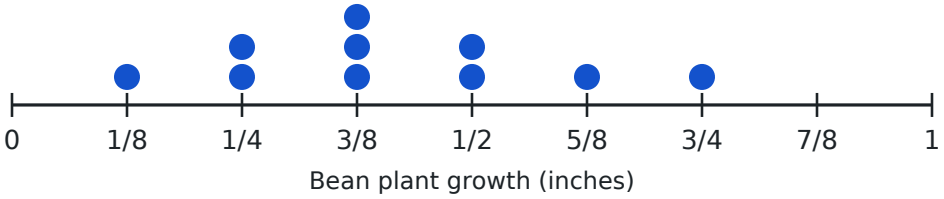
2. Look at the bean plant line plot. Which amount of growth is most common?



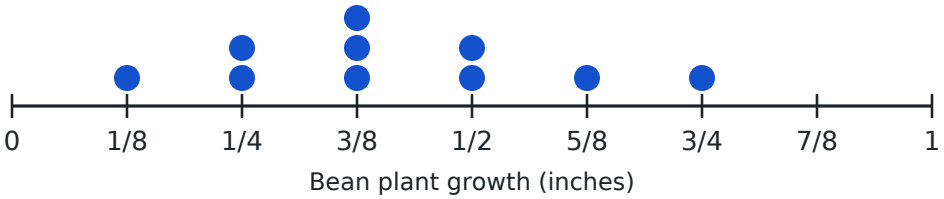
3. Look at the bean plant line plot. How many plants grew exactly $\frac{1}{2}$ inch?



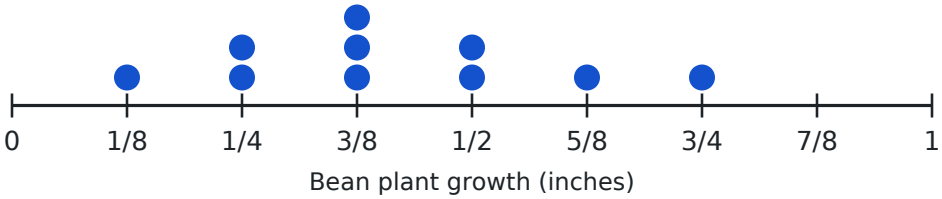
4. Look at the bean plant line plot. How much more did the plant that grew the most grow than the plant that grew the least?



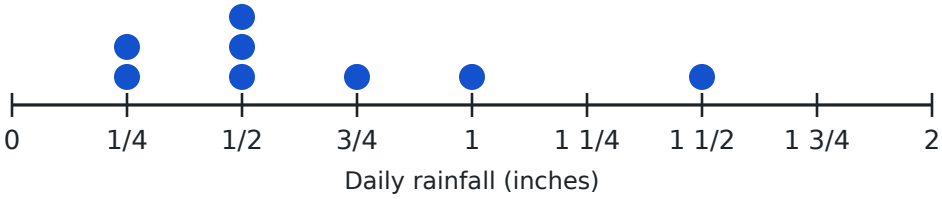
5. Look at the bean plant line plot. How many plants grew more than $\frac{3}{8}$ inch?



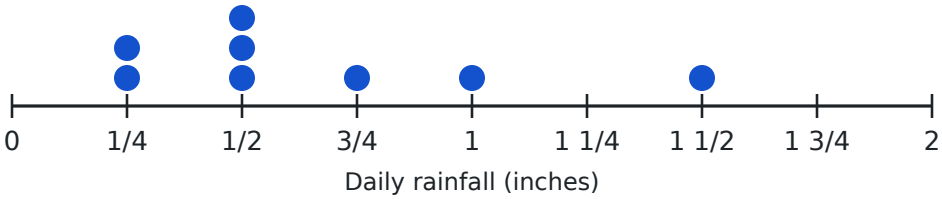
6. Look at the bean plant line plot. What is the total growth of the plants that grew $\frac{1}{4}$ inch each?



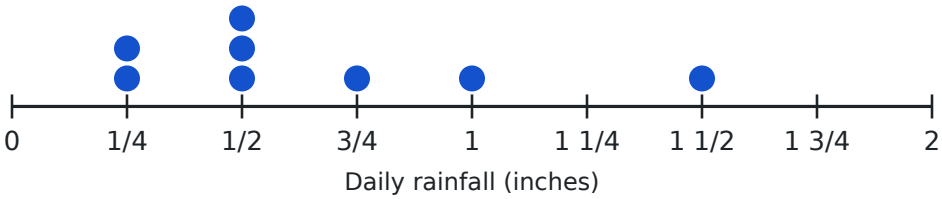
7. The line plot shows the rainfall on 8 days. What was the total rainfall?



8. Look at the rainfall line plot. On how many days was the rainfall more than $\frac{1}{2}$ inch?



9. On the rainfall line plot, what does each dot stand for?



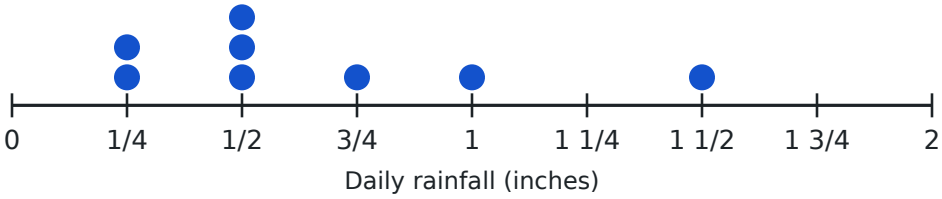
A. the number of rainy days

B. the rainfall on one day

C. one inch of rain

D. the total rainfall

10. Look at the rainfall line plot. On how many days was the rainfall exactly $\frac{1}{2}$ inch?



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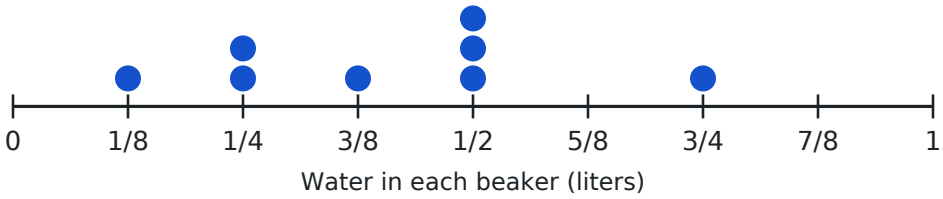
Line Plots with Fractions Worksheet

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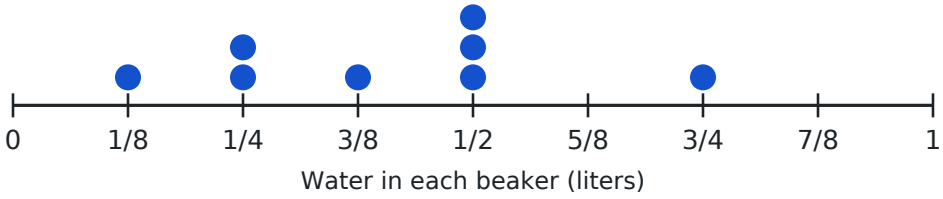
On Level

Grade-level practice.

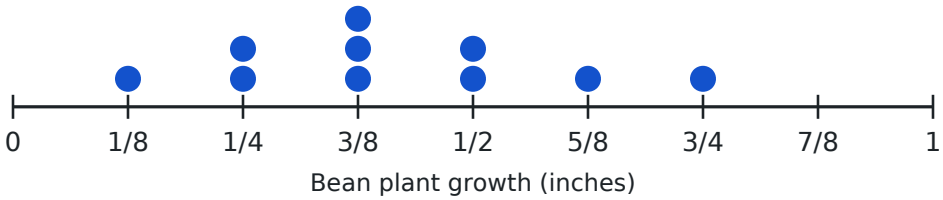
1. The line plot shows the water in 8 identical beakers. What is the total amount of water?



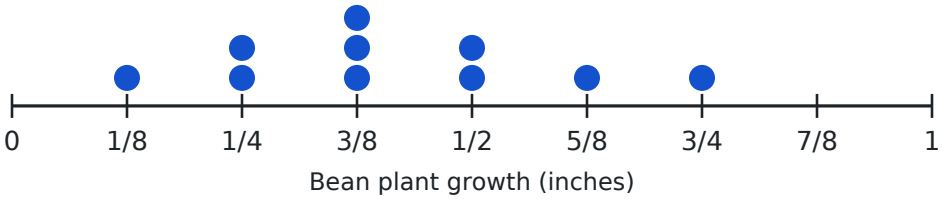
2. Look at the beaker line plot. If all the water were poured out and shared equally among the 8 beakers, how much would each beaker hold?



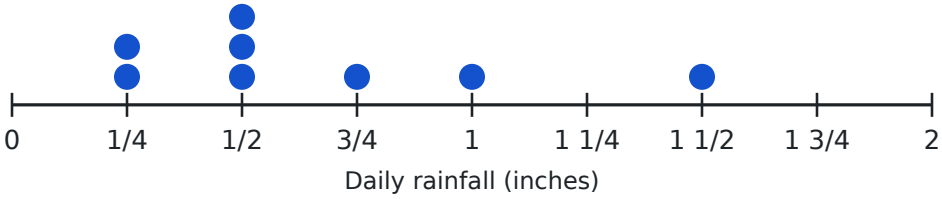
3. Look at the bean plant line plot. What is the total growth of all 10 plants?



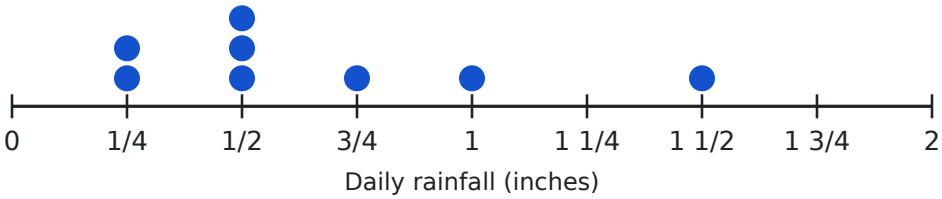
4. Look at the bean plant line plot. If the total growth were shared equally among the 10 plants, how much would each plant have grown?



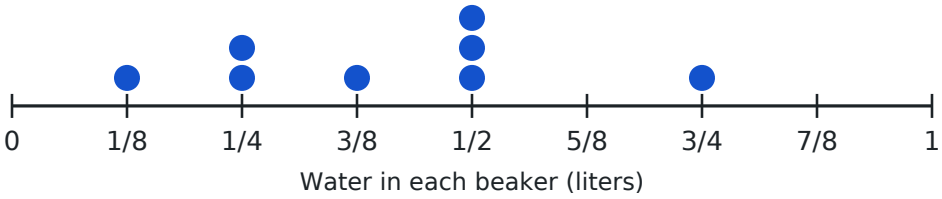
5. Look at the rainfall line plot. How much more rain fell on the wettest day than on the driest day?



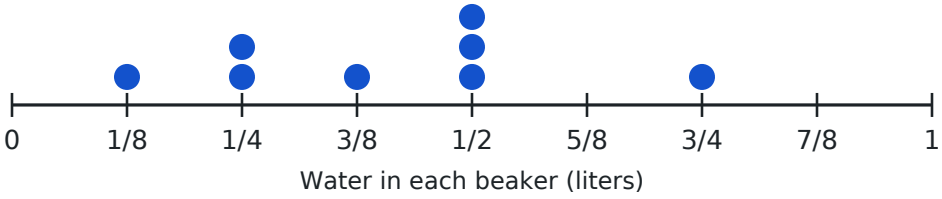
6. Look at the rainfall line plot. What was the total rainfall on the days with less than 1 inch?



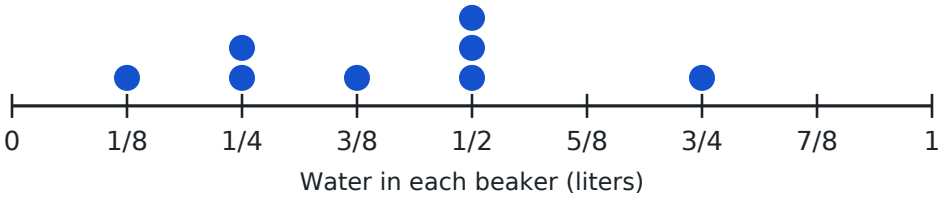
7. Look at the beaker line plot. How much more water is in the fullest beaker than in the emptiest one?



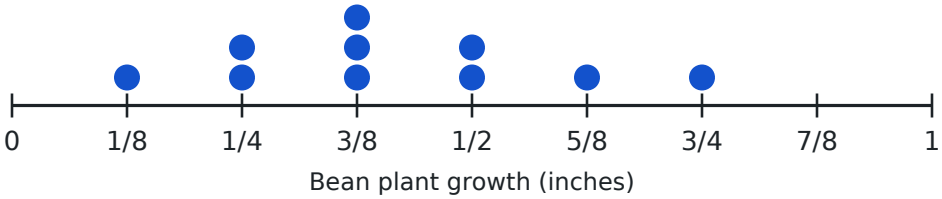
8. Look at the beaker line plot. How many beakers hold at least $\frac{1}{2}$ liter?



9. Look at the beaker line plot. Explain how to find how much water each beaker would hold if the water were shared equally, and give the amount.



10. Look at the bean plant line plot. What is the total growth of the plants that grew less than $\frac{1}{2}$ inch?



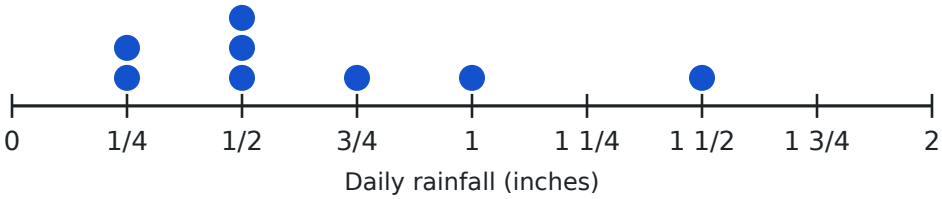
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Challenge

Multi-step and word problems that stretch it.

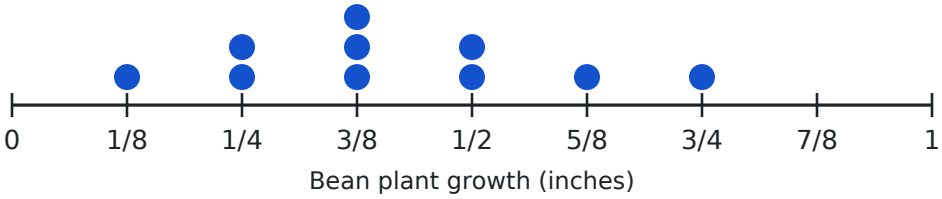
1. Look at the rainfall line plot. If the same total rain had fallen evenly over the 8 days, how much would have fallen each day?



2. Ty measures 7 leaves (in inches): $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{3}{4}$, 1. On a line plot, how many X's go above $\frac{3}{4}$?

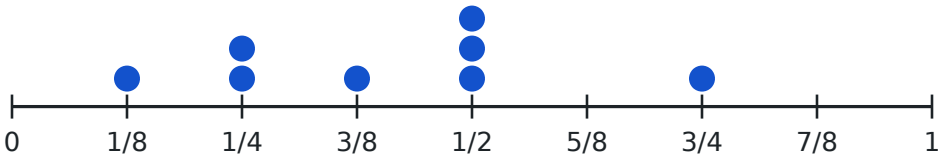
3. For Ty's 7 leaves ($\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{3}{4}$, 1 inch), what is the total length?

4. Look at the bean plant line plot. Next week, only the two plants at $\frac{1}{2}$ inch grow, each another $\frac{1}{8}$ inch; no other plant changes. How many plants would then be at $\frac{5}{8}$ inch?



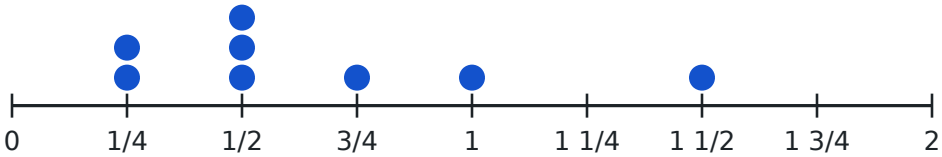
Bean plant growth (inches)

5. Look at the beaker line plot. All the beakers with less than $\frac{1}{2}$ liter are poured into one jar. How much water is in the jar?



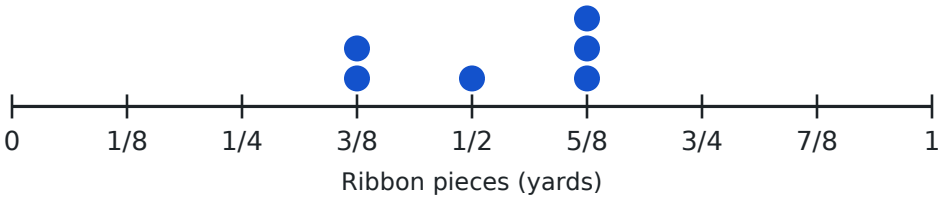
Water in each beaker (liters)

6. Look at the rainfall line plot. What fraction of the days had more than $\frac{1}{2}$ inch of rain?

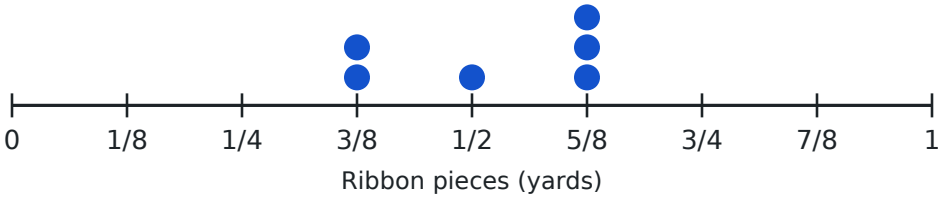


Daily rainfall (inches)

7. The line plot shows the lengths of 6 ribbon pieces. What is their total length?



8. Look at the ribbon line plot. If the ribbon were cut into 6 equal pieces instead, how long would each piece be?



9. Measurements are in eighths of an inch. Which line plot scale fits best?

   A. marks every 1 inch

   B. marks every 2 inches

   C. marks every $\frac{1}{2}$ inch

   D. marks every $\frac{1}{8}$ inch

10. Look at the beaker line plot. $\frac{1}{8}$ liter is added to each beaker. What is the new total?

