Unit 6, Lesson 15

Problem Solving with Line Plots

Let's solve problems, using a line plot.

Warm-up

Number Talk: Multiply by 18

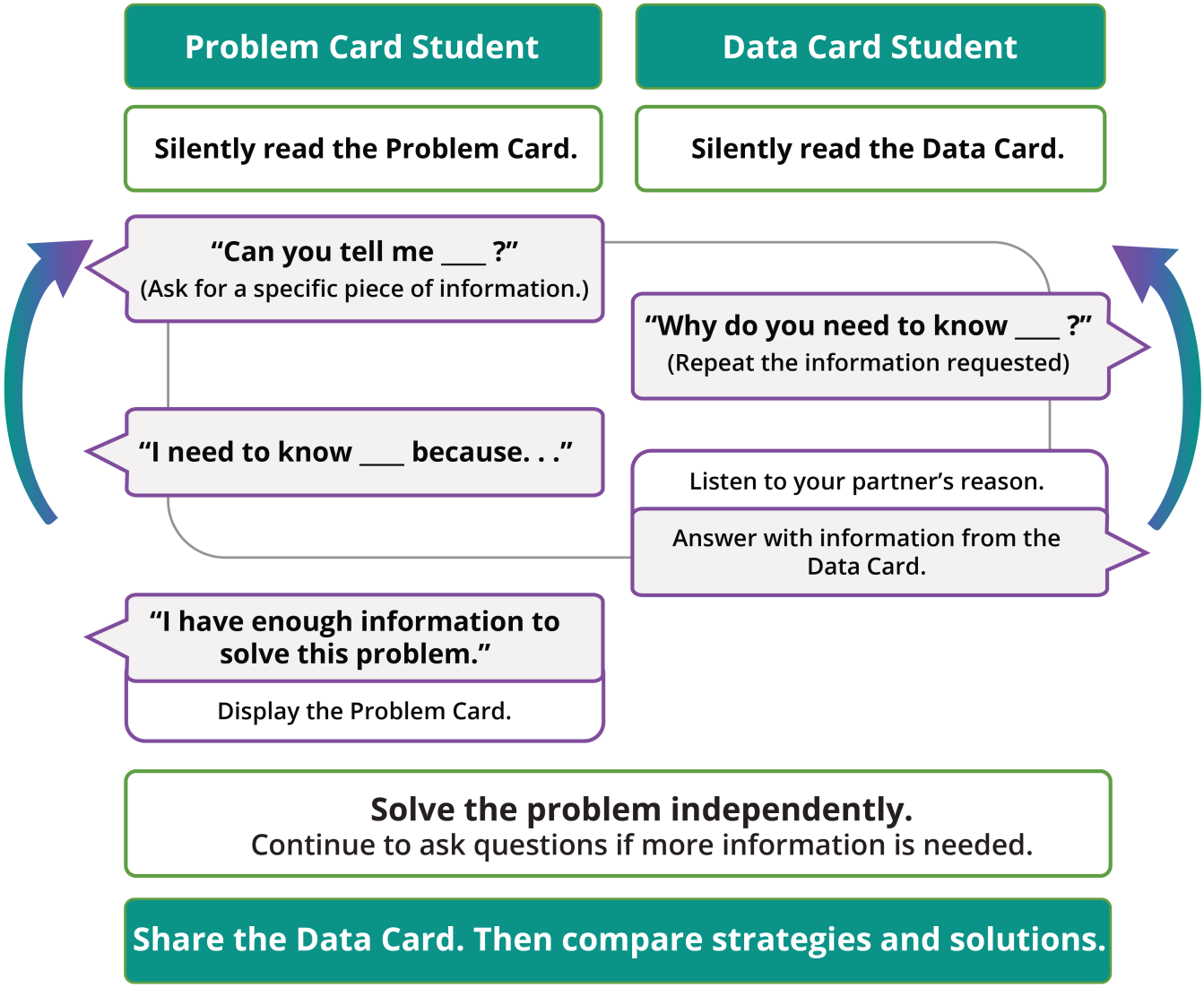
Find the value of each expression mentally.

- $\frac{1}{3} \times 18$
- $\frac{2}{3} \times 18$
- $\frac{4}{3} \times 18$
- $\frac{5}{3} \times 18$

Activity 1

Info Gap: Picking Fruit

Your teacher will give you either a Problem Card or a Data Card. Do not show or read your card to your partner.

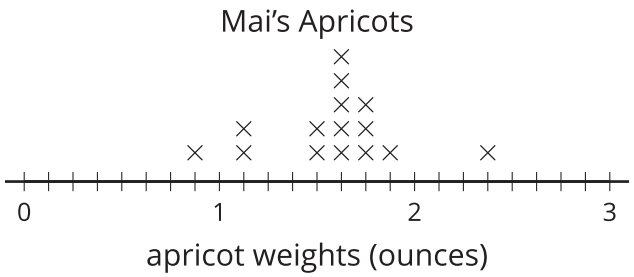


Pause here so your teacher can review your work. Ask your teacher for a new set of cards and repeat the activity, trading roles with your partner.

Activity 2

Mathematical Questions

This line plot shows the weights of the apricots that Mai picked.



1. What fraction of the apricots weigh less than $1\frac{1}{2}$ ounces each? Explain or show your reasoning.

2. Write a multiplication equation that represents the total weight of the apricots that each weigh $1\frac{5}{8}$ ounces.

3. Do all of Mai's apricots together weigh more than or less than 1 pound? Explain or show your reasoning.

Section B Summary

We learned to add and subtract fractions.

We learned how to add and subtract fractions with denominators that are the same.

Example: $\frac{7}{10} + \frac{4}{10}$

We add the tenths. There are 11 tenths, so $\frac{7}{10} + \frac{4}{10} = \frac{11}{10}$.

We also learned how to add and subtract fractions with denominators that are not the same.

Example: $\frac{1}{6} + \frac{3}{8}$

We look for a common denominator, so we can add parts of the same size.

One way to find a common denominator is to use the product of the two denominators. This is always a common multiple.

Using 48 as a denominator, we find $\frac{1}{6} + \frac{3}{8} = (\frac{1}{6} \times \frac{8}{8}) + (\frac{3}{8} \times \frac{6}{6})$. This means $\frac{1}{6} + \frac{3}{8} = \frac{26}{48}$.

We also can use a smaller common denominator.

Since 24 is a multiple of 6 and 8, we can rewrite $\frac{1}{6} + \frac{3}{8}$ as $\frac{4}{24} + \frac{9}{24}$, which is $\frac{13}{24}$.