Eureka Math

3rd Grade
Module 6
Lesson 6

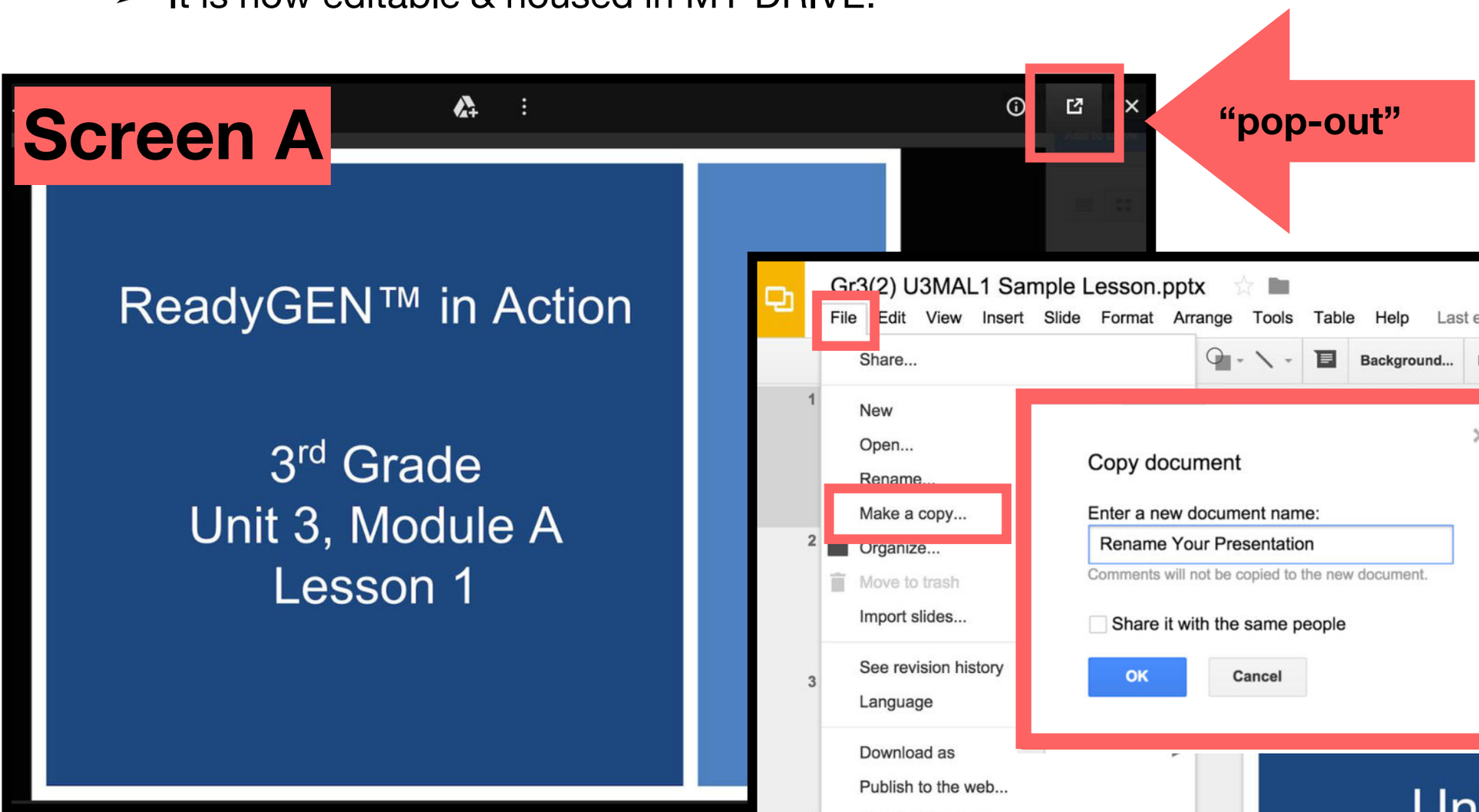
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

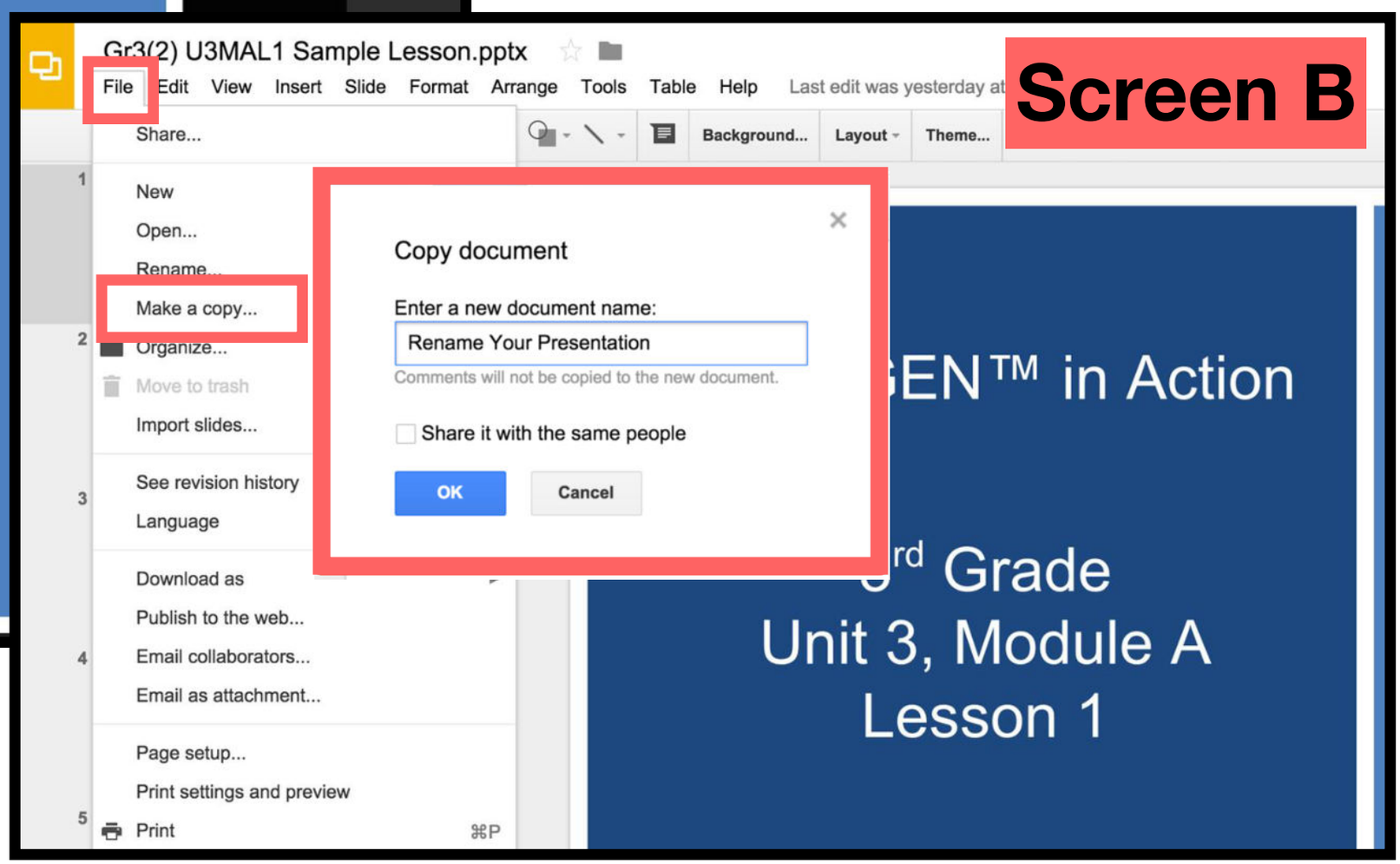
Directions for customizing presentations are available on the next slide.

Customize this Slideshow

Reflecting your Teaching Style and Learning Needs of Your Students

- When the Google Slides presentation is opened, it will look like Screen A.
- Click on the “pop-out” button in the upper right hand corner to change the view.
- The view now looks like Screen B.
- Within Google Slides (not Chrome), choose FILE.
- Choose MAKE A COPY and rename your presentation.
- Google Slides will open your renamed presentation.
- It is now editable & housed in MY DRIVE.





Icons

Read, Draw, Write

Learning Target

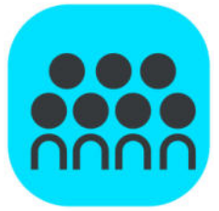
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

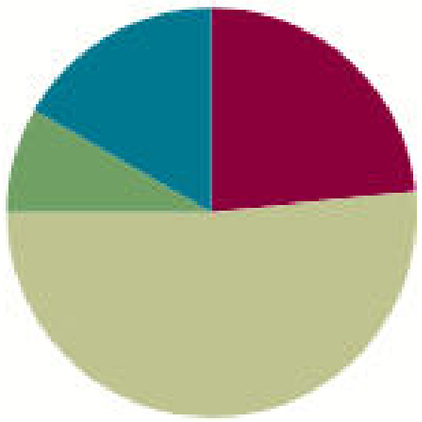
Small Group Time

Lesson 6

Objective: Interpret measurement data from various line plots.

Suggested Lesson Structure

Fluency Practice	(14 minutes)
Application Problem	(5 minutes)
Concept Development	(31 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can interpret measurement data from line plots.

Fluency Practice

Group Counting (3 min.)

Count by sevens to 70.

7, 14, 21, 28, 35, 42, 49, 56, 63, 70.

Let’s count again. Try not to look at the board. When I raise my hand, stop.

7, 14, 21.

21 is the same as how many sevens?

3 sevens.

Say 3 sevens as a multiplication sentence.
3×7=21.

Fluency Practice

Group Counting (3 min.)

7, 14, 21, 28, 35, 42, 49, 56, 63, 70.

Continue.

28, 35, 42, 49, 56.

56 is how many sevens?

8 sevens.

Fluency Practice

Group Counting (3 min.)

Say 8 sevens as a multiplication sentence.

$8 \times 7 = 56$

$14 \div 7 = ?$

Let’s find the answer counting by sevens.

7, 14.

Fluency Practice

Group Counting (3 min.)

How many sevens are in 14?

2 sevens.

Say the division number sentence.

14÷7=2.

Fluency Practice

Multiply by 6 (7 minutes)

5 × 6 = _____

Let’s skip-count up by sixes to find the answer.

6, 12, 18, 24, 30.

3 x 6 = _____

Let’s skip-count up by sixes again.

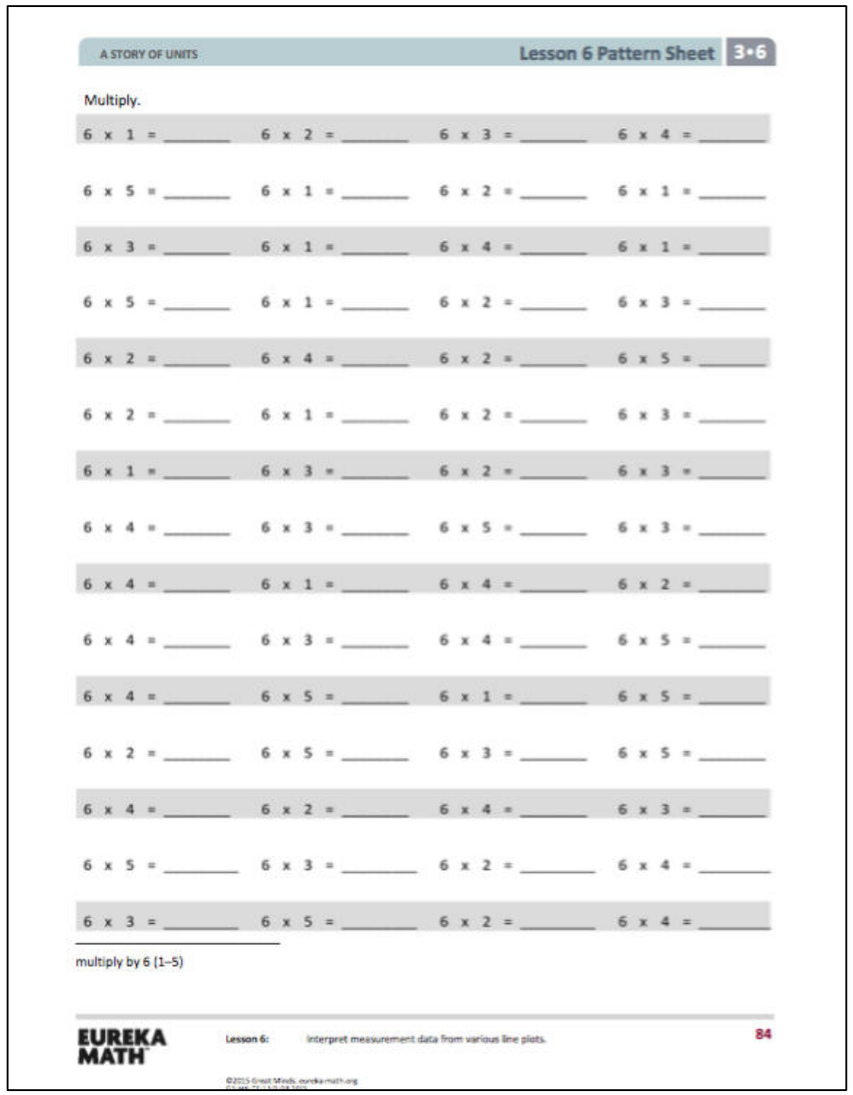
6, 12, 18.

Fluency Practice

Multiply by 6 (7 minutes)

Repeat the process for 4 × 6.

Let’s practice multiplying by 6. Be sure to work left to right across the page.



A STORY OF UNITS — Lesson 6 Pattern Sheet 3•6

Multiply.

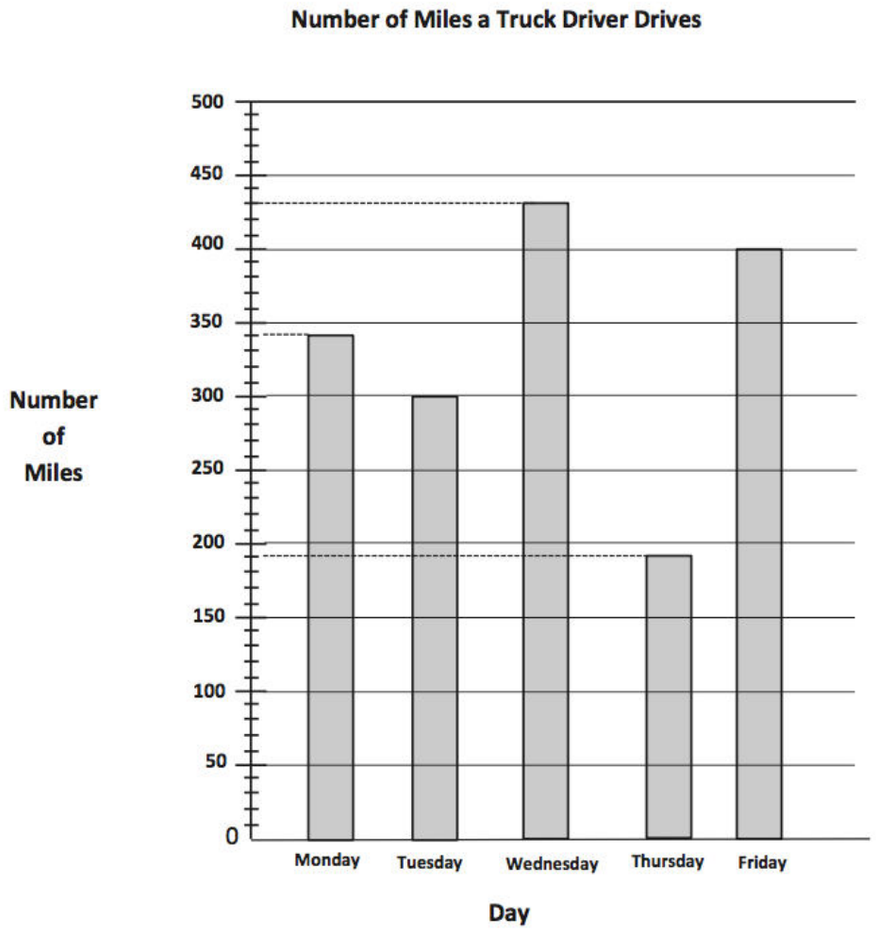
6 x 1 = _____	6 x 2 = _____	6 x 3 = _____	6 x 4 = _____
6 x 5 = _____	6 x 1 = _____	6 x 2 = _____	6 x 1 = _____
6 x 3 = _____	6 x 1 = _____	6 x 4 = _____	6 x 1 = _____
6 x 5 = _____	6 x 1 = _____	6 x 2 = _____	6 x 3 = _____
6 x 2 = _____	6 x 4 = _____	6 x 2 = _____	6 x 5 = _____
6 x 2 = _____	6 x 1 = _____	6 x 2 = _____	6 x 3 = _____
6 x 1 = _____	6 x 3 = _____	6 x 2 = _____	6 x 3 = _____
6 x 4 = _____	6 x 3 = _____	6 x 5 = _____	6 x 3 = _____
6 x 4 = _____	6 x 1 = _____	6 x 4 = _____	6 x 2 = _____
6 x 4 = _____	6 x 3 = _____	6 x 4 = _____	6 x 5 = _____
6 x 4 = _____	6 x 5 = _____	6 x 1 = _____	6 x 5 = _____
6 x 2 = _____	6 x 5 = _____	6 x 3 = _____	6 x 5 = _____
6 x 4 = _____	6 x 2 = _____	6 x 4 = _____	6 x 3 = _____
6 x 5 = _____	6 x 3 = _____	6 x 2 = _____	6 x 4 = _____
6 x 3 = _____	6 x 5 = _____	6 x 2 = _____	6 x 4 = _____

multiply by 6 (1–5)

EUREKA MATH — Lesson 6: Interpret measurement data from various line plots. 84

Fluency Practice

Read Bar Graphs (4 minutes)

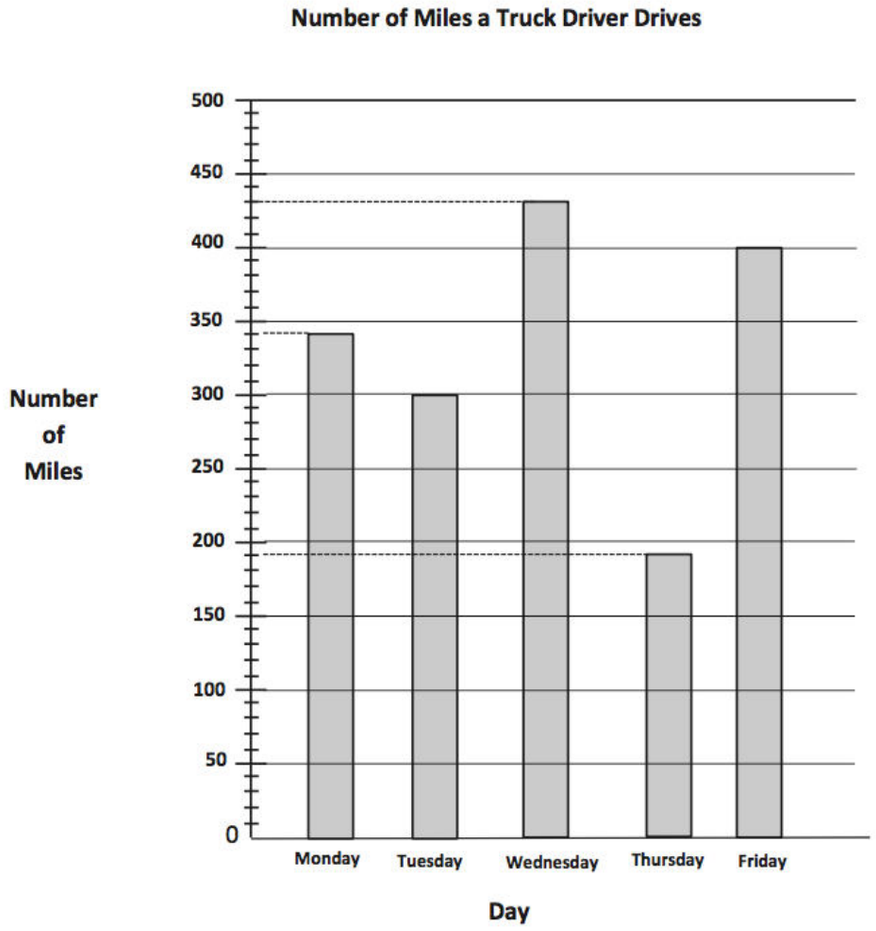


What does this bar graph show?

The number of miles a truck driver drove Monday through Friday.

Fluency Practice

Read Bar Graphs (4 minutes)

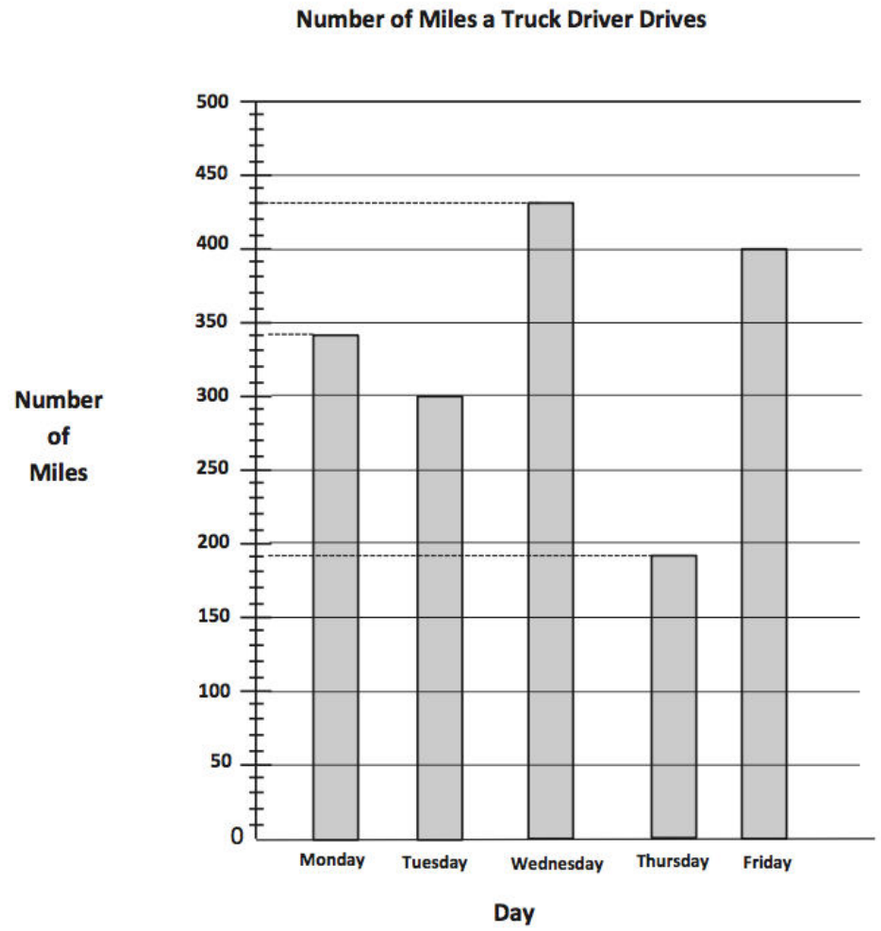


On which day did the truck driver drive the most miles?

Wednesday.

Fluency Practice

Read Bar Graphs (4 minutes)

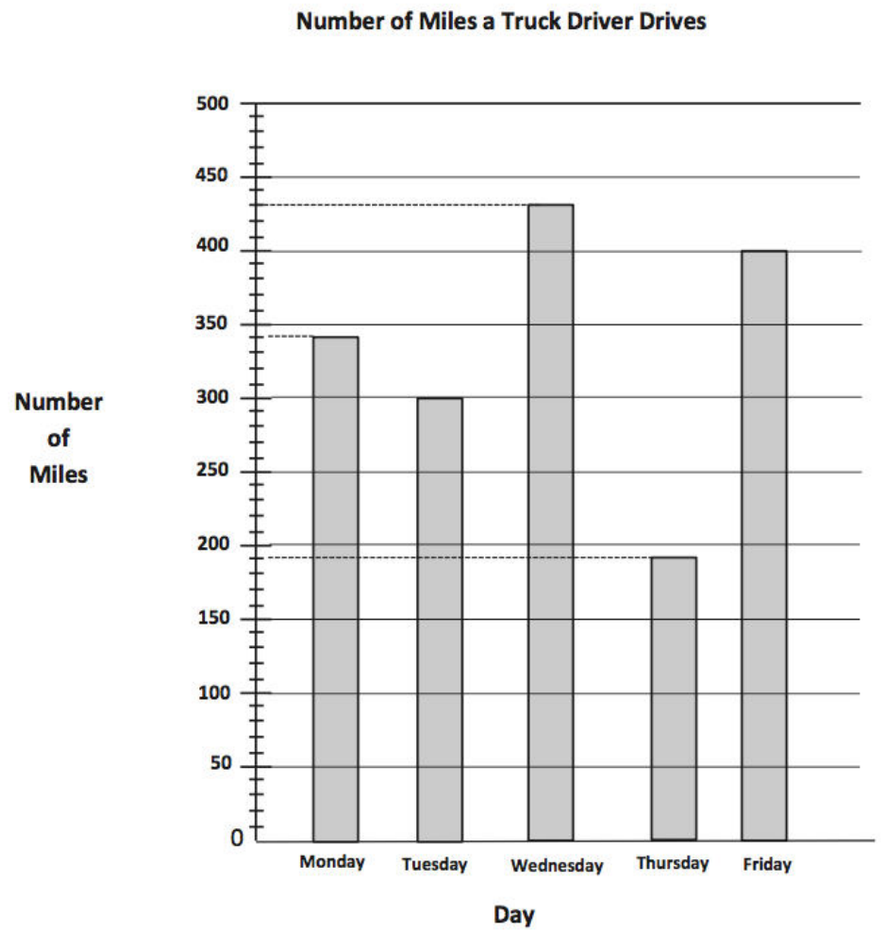


What is the scale for number of miles?

50

Fluency Practice

Read Bar Graphs (4 minutes)

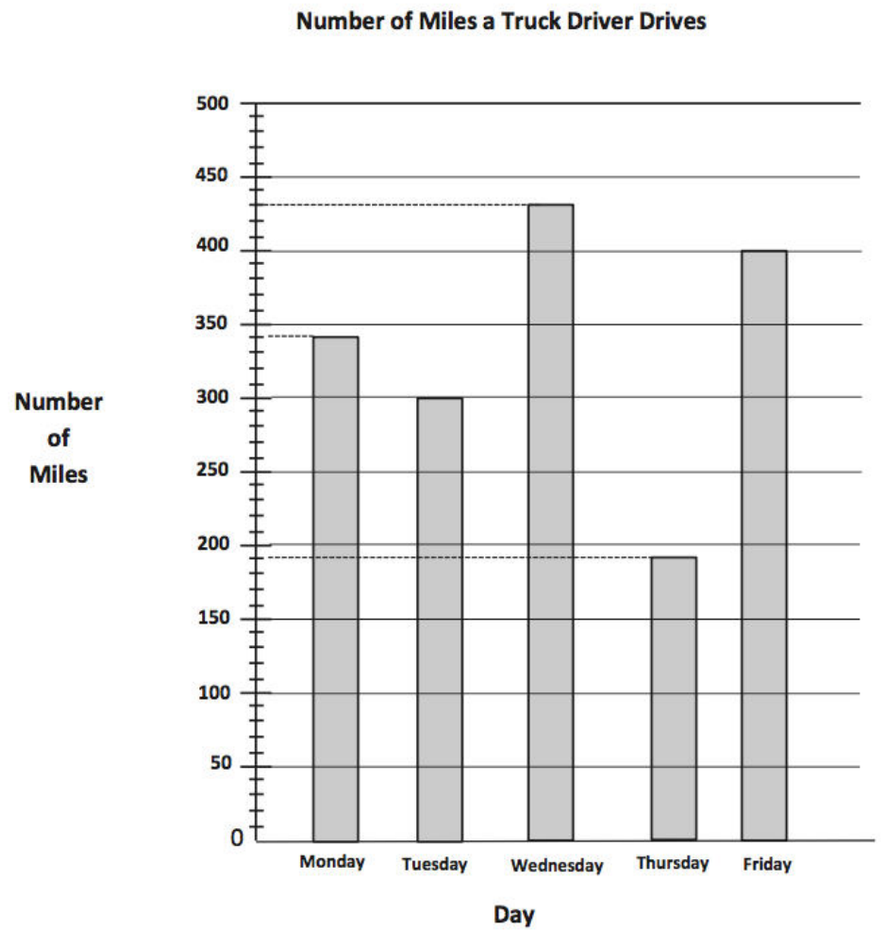


How many intervals are there between each 50?

5.

Fluency Practice

Read Bar Graphs (4 minutes)

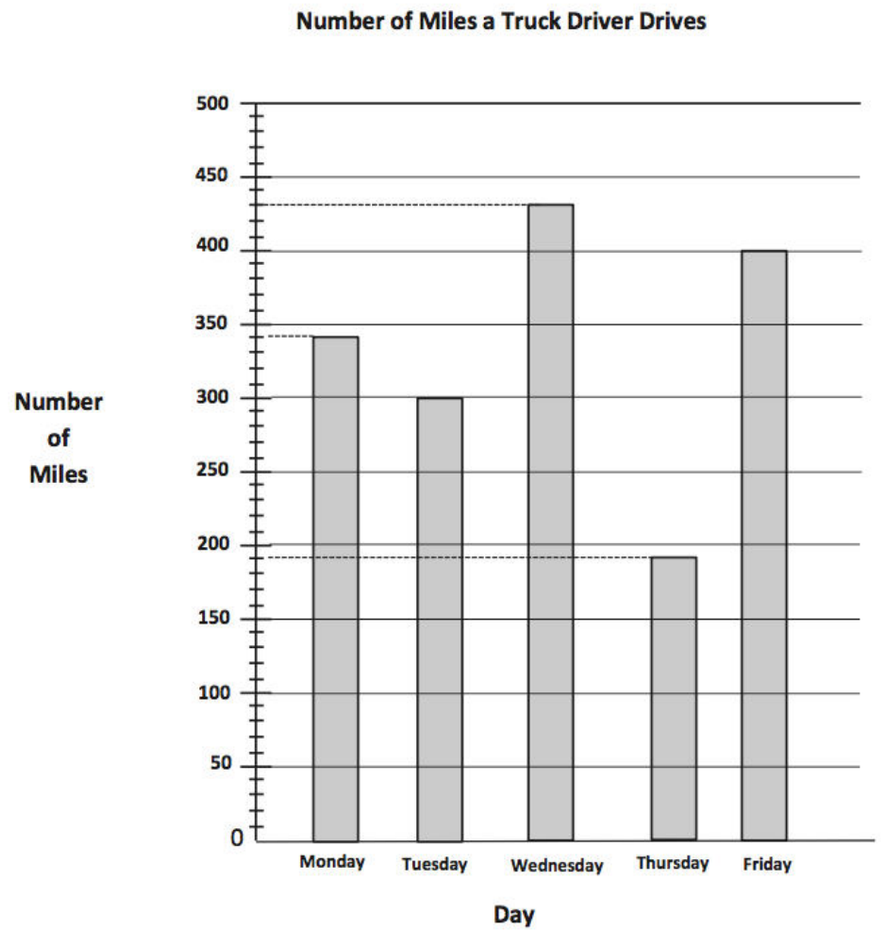


On your boards, write a number sentence to show the value of the smaller intervals.

$50 \div 5 = 10$.

Fluency Practice

Read Bar Graphs (4 minutes)



How many miles did the truck driver drive on Monday?

340 miles.

Application Problem

Katelynn measures the height of her bean plant on Monday and again on Friday. She says that her bean plant grew 10 quarter inches. Her partner records 2 ½ inches on his growth chart for the week. Is her partner right? Why or why not?

Application Problem

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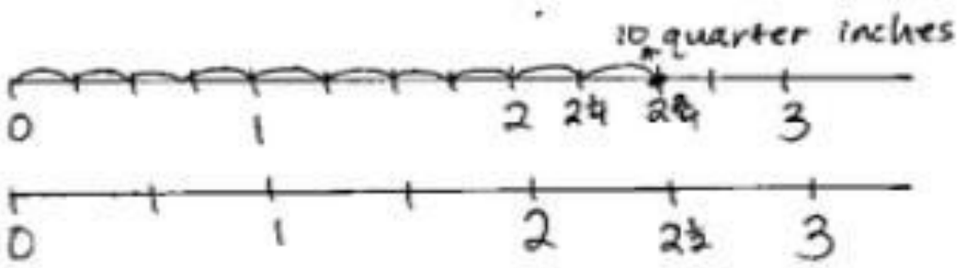
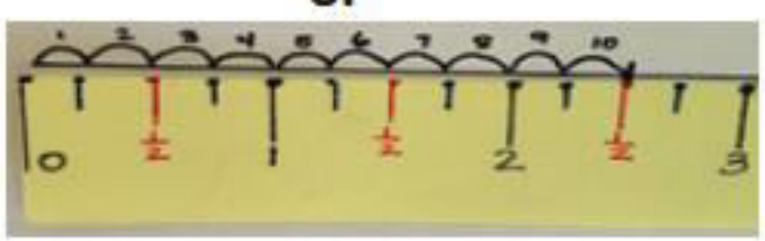
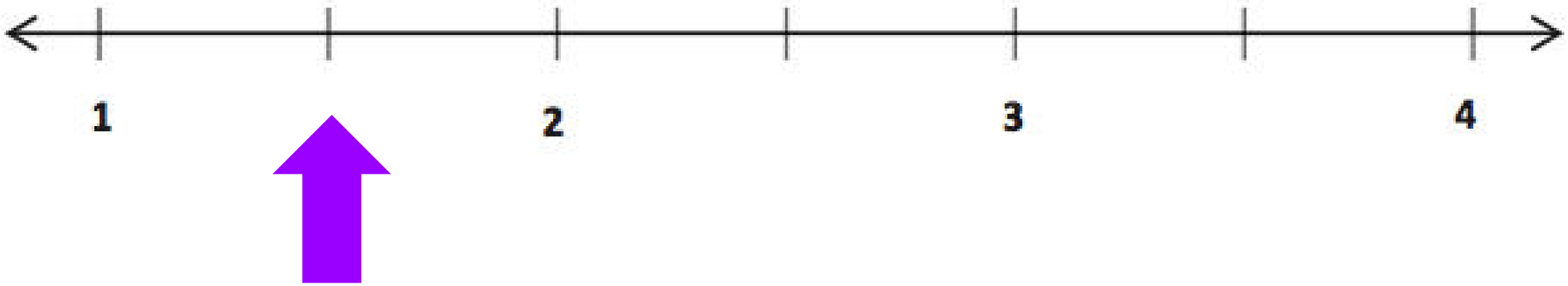


or



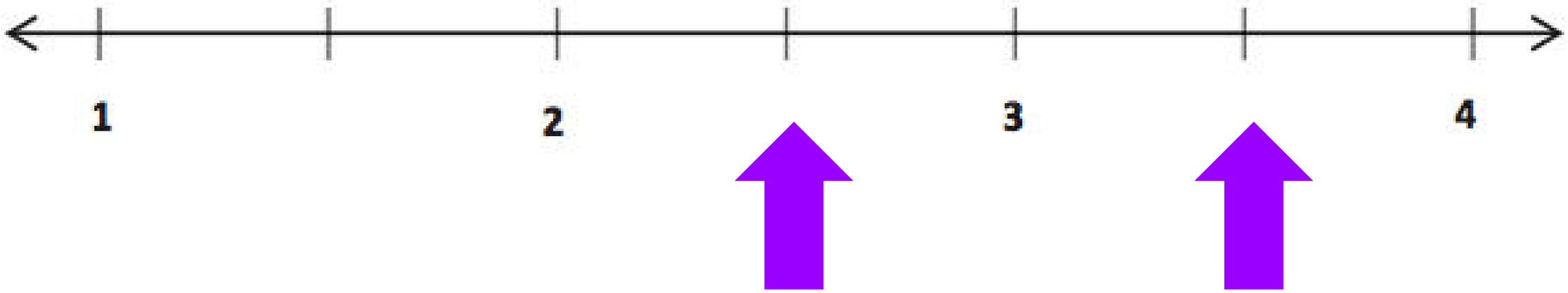
Yes, her partner is right. I drew a ruler divided into quarter inches and 10 quarter inches is 2½ inches. Then I drew another ruler divided into half inches. I can see that 2½ is the same as 2½ on my rulers.

Concept Development



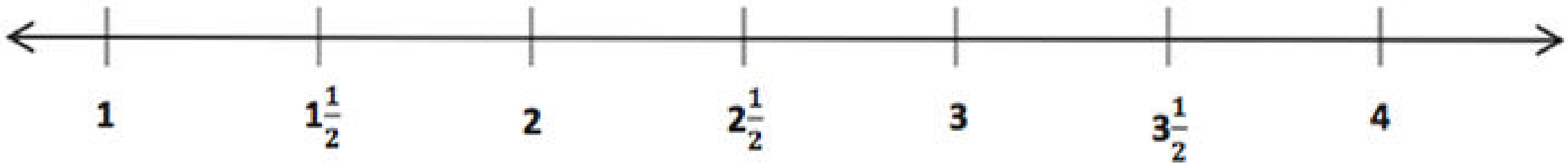
What should I label this tick mark on the number line?

Concept Development



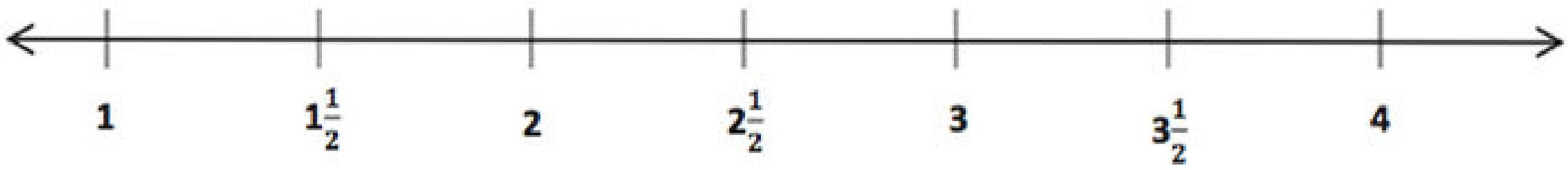
When I point to each tick mark, tell me what to write.

Concept Development



Talk to a partner. How is this number line similar to the ruler we made yesterday? How is it different?

Concept Development



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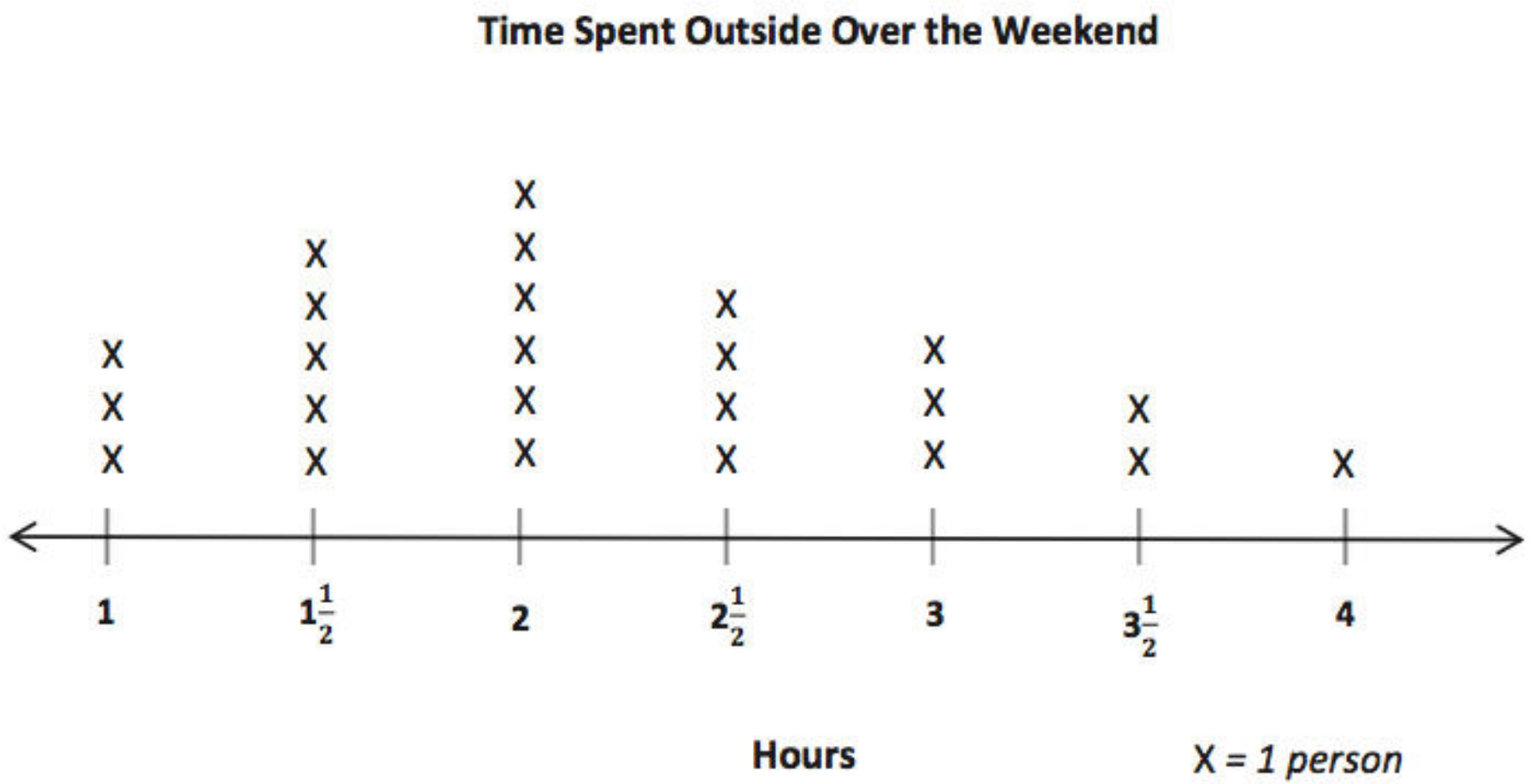
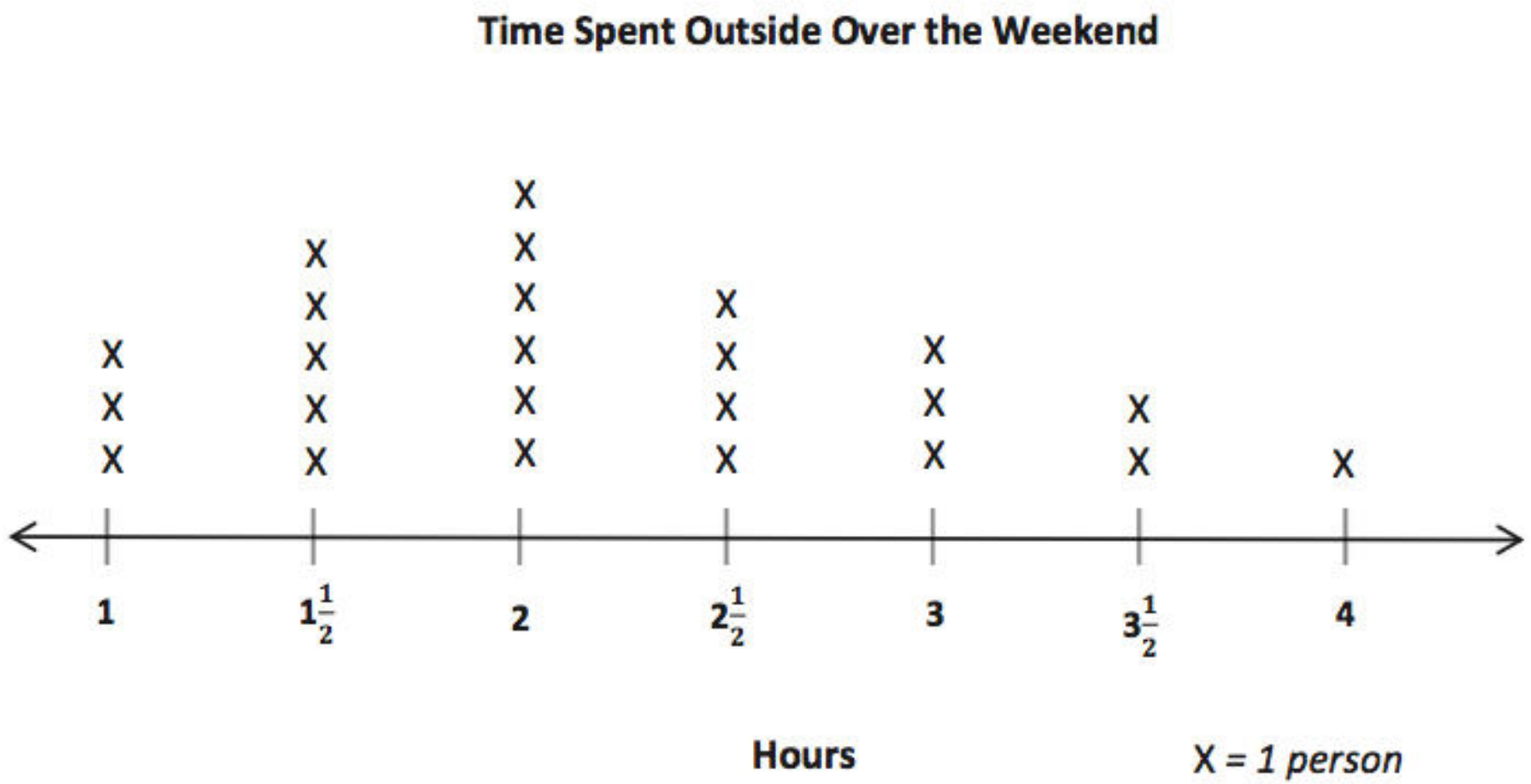


What does the number 1 on this line plot represent?

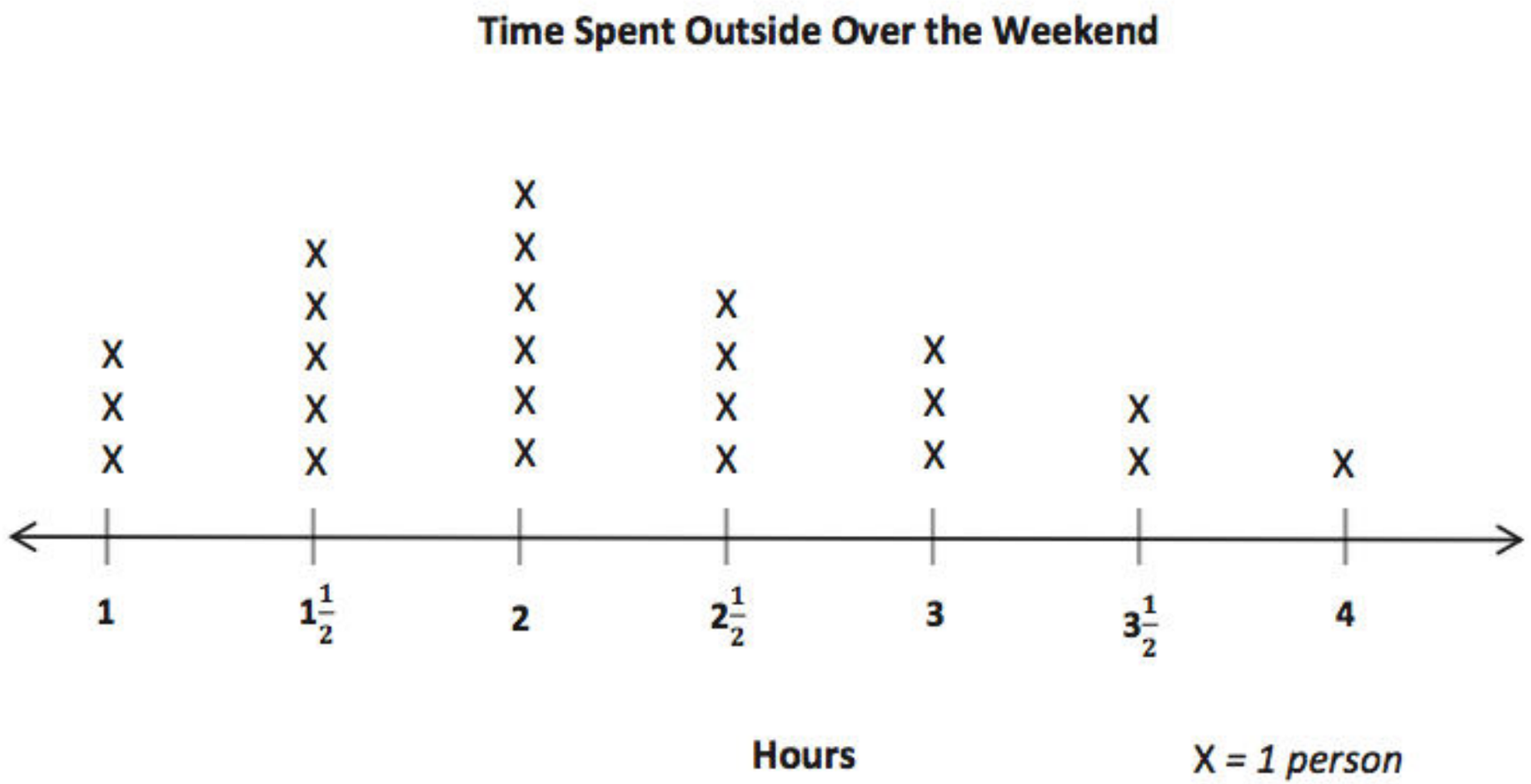
What does the number 1 ½ represent?

Concept Development



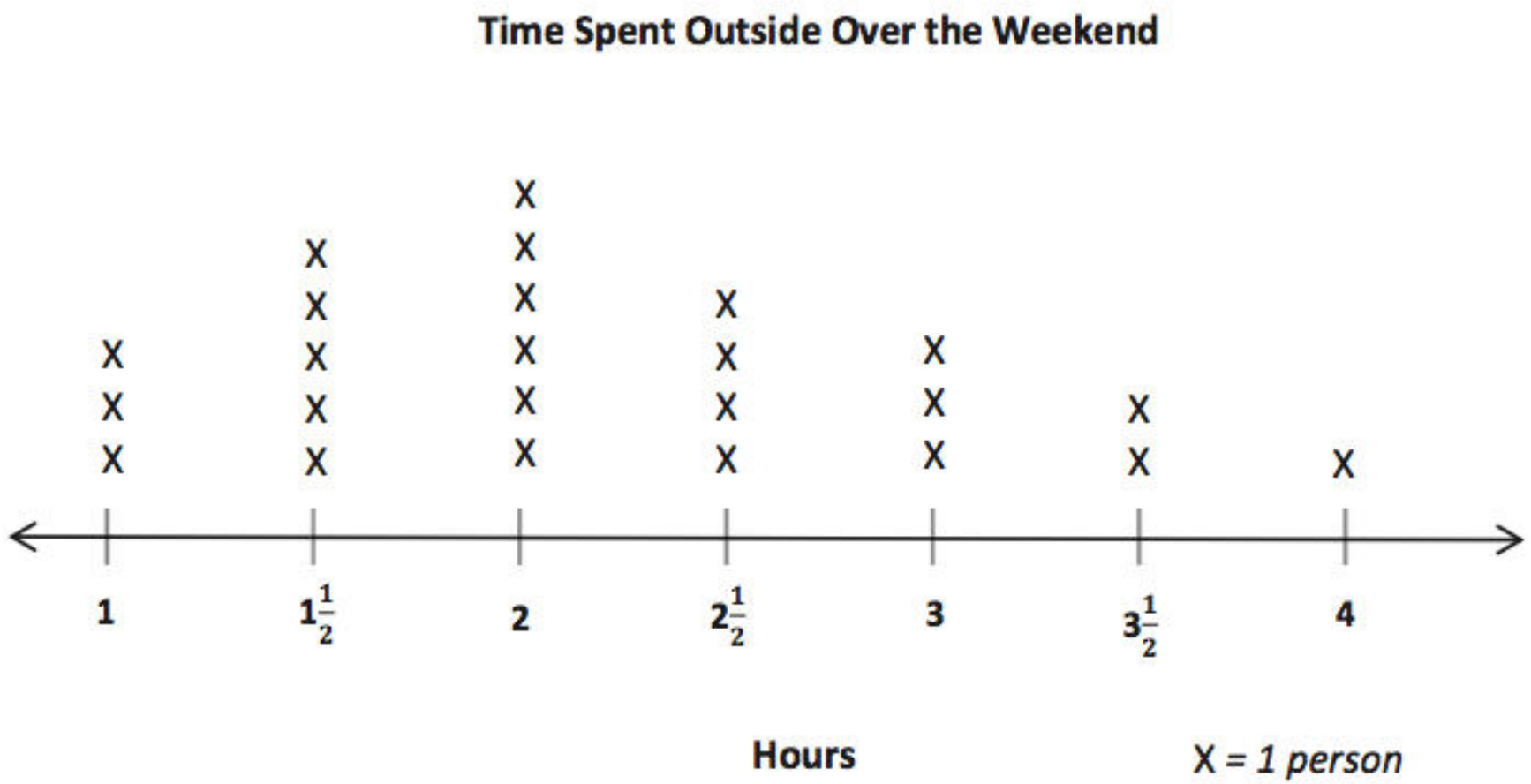
If the label on our line plot was people instead of hours, could we have fractions?

Concept Development



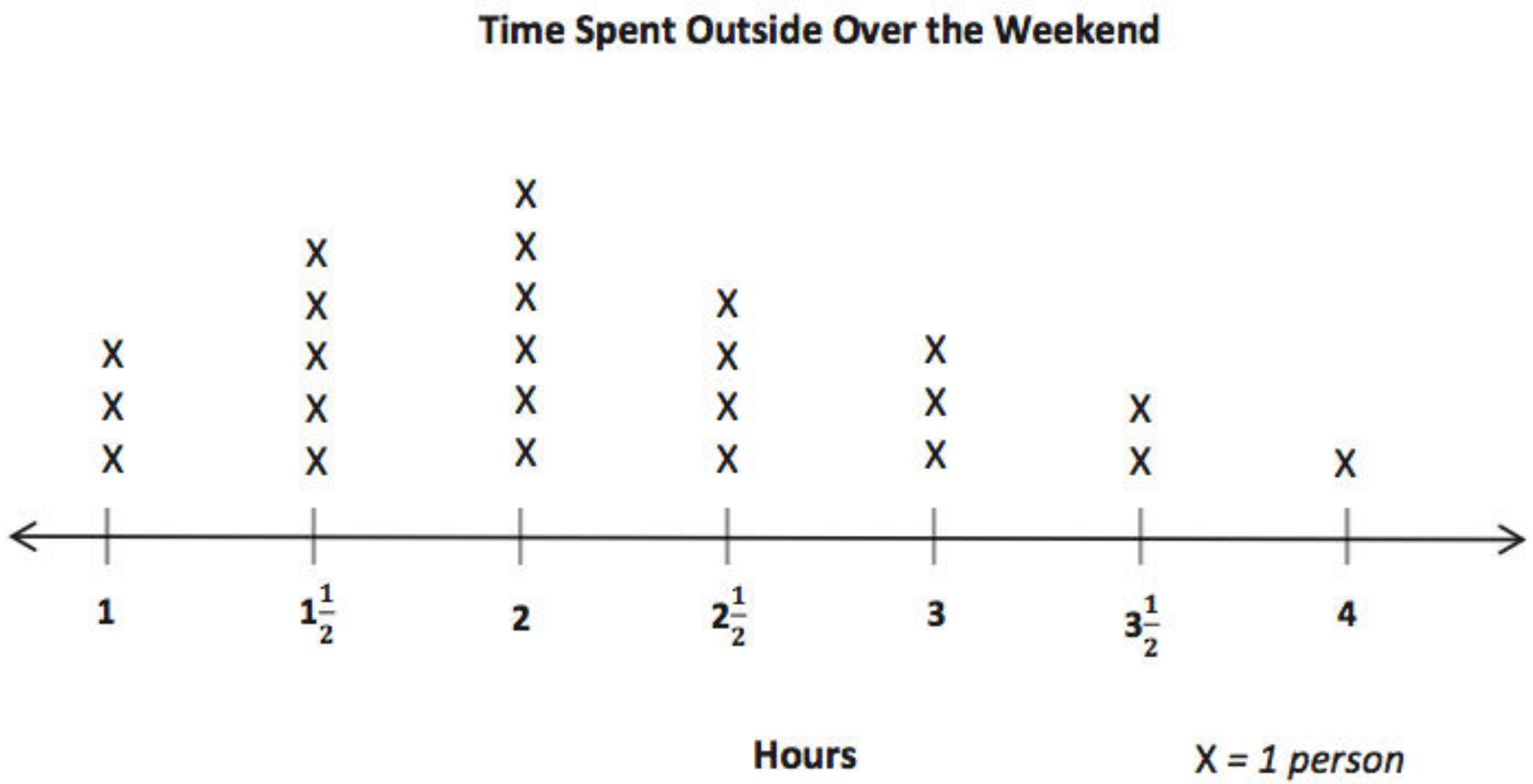
Talk to your partner. What else besides time could you show on a line plot with fractions?

Concept Development



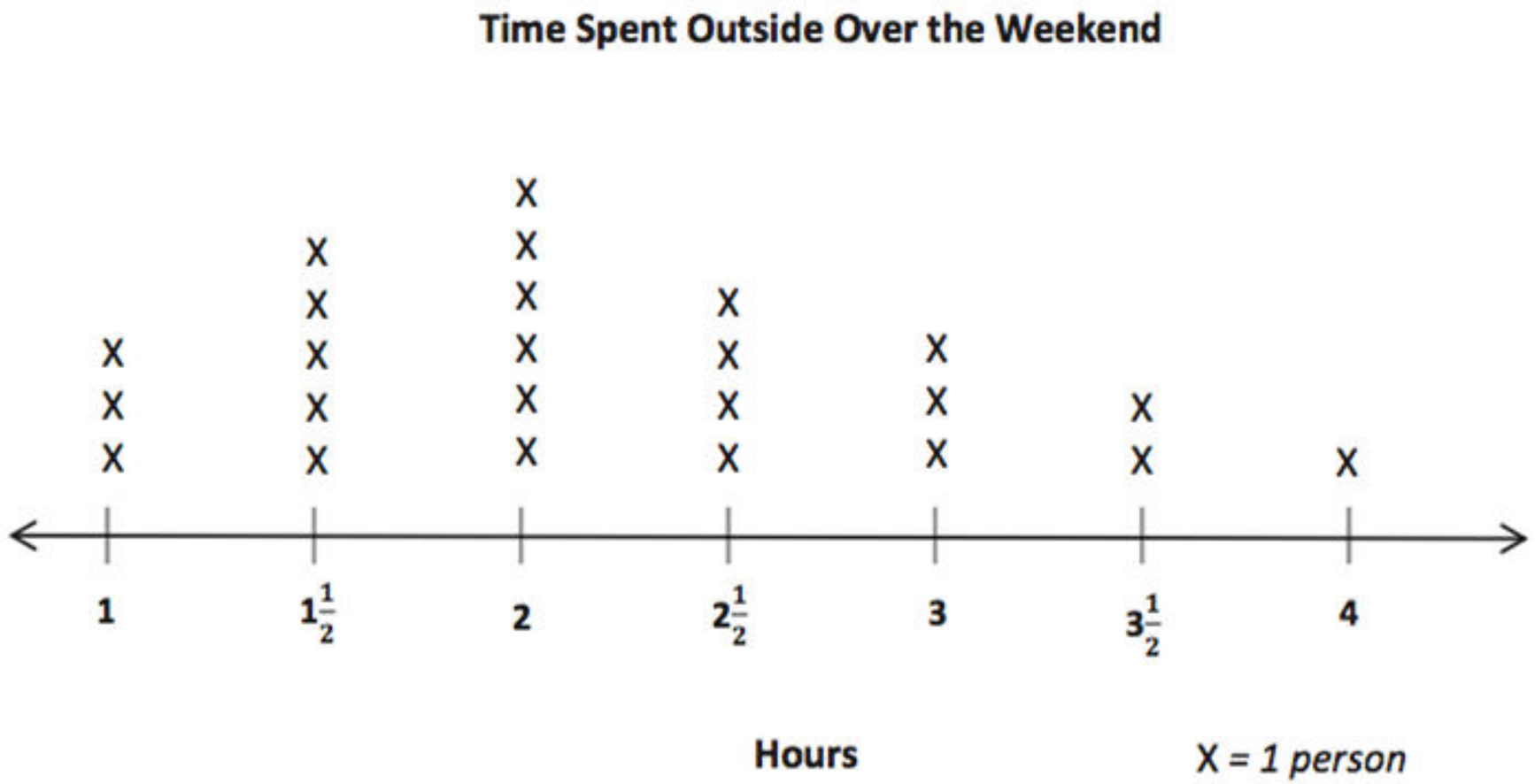
We can show measurements on a line plot with fractions. How is a line plot like a bar graph or tape diagram?

Concept Development



Which amount of time spent outside has the most X's?

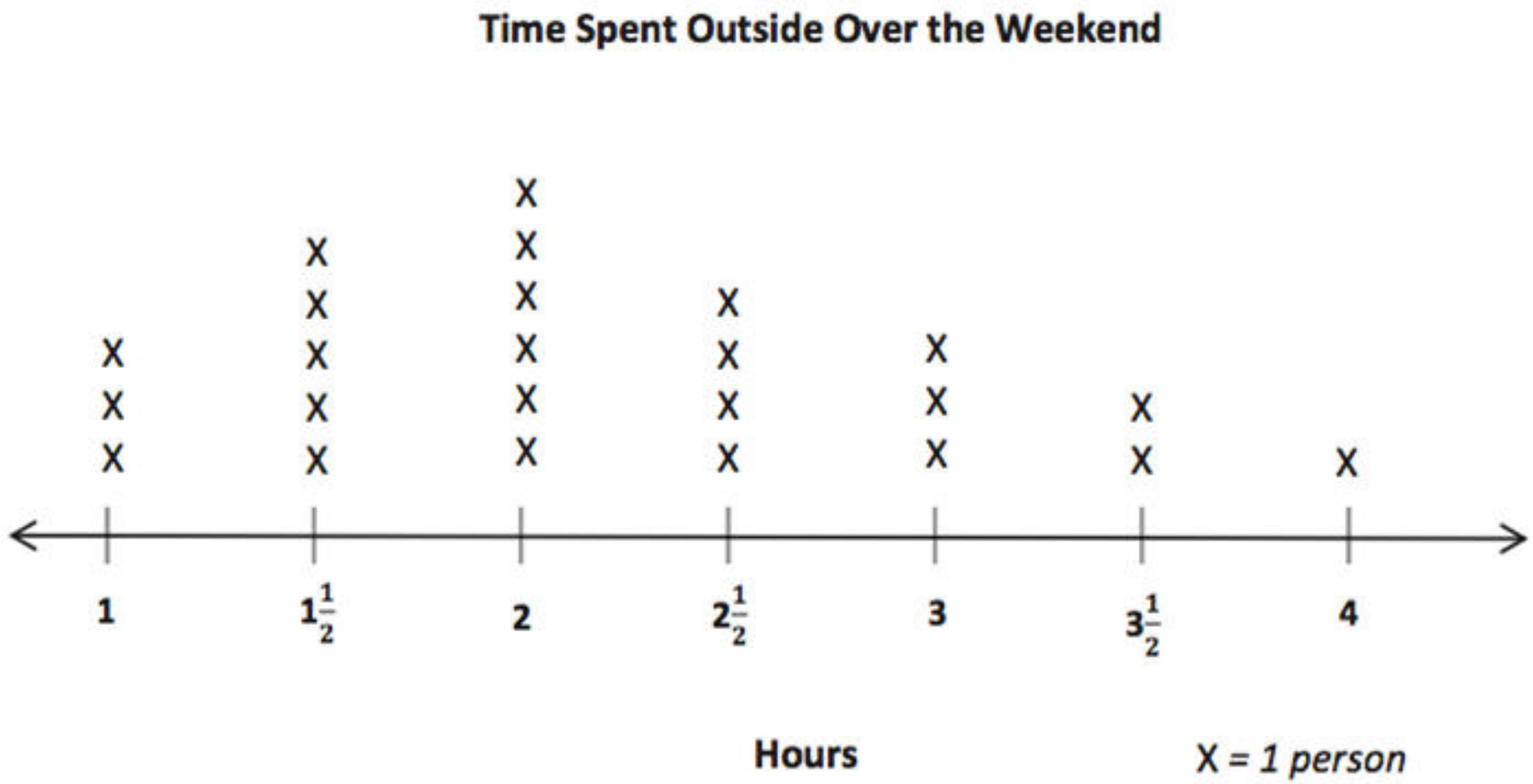
Concept Development



2 hours is the most **frequent** or common amount of time spent outside because it has the most X's.

What is the second most frequent amount of time spent outside?

Concept Development



What does each X on the line plot represent?

How many people spent 2 hours outside?

Concept Development

Problem 2: Read and interpret line plots with fractions.

Note:

Students work in groups of four to write true statements about the Time Spent Outside line plot. The goal is to write as many true statements as possible in the time given. Each student in the group uses a different colored marker and can only write with his or her specified color. This ensures engagement and equal participation in this activity. Groups then prepare a poster with their statements to present to the class.
If time allows, the class can create a new line plot for this part of the lesson. Students can measure their pencils to the nearest quarter inch. Then, they can record their pencil's measurement on a class line plot, using stickers (e.g., stars or colored dots) or by making X's.

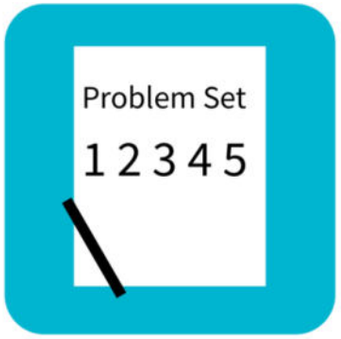
Concept Development

1. Include these words in your statements: at least, frequent, less than, and more than.

2. To achieve the highest score of 4, each of the following must be included and be correct:

a. A statement using the word frequent or common.
b. A statement using the words at least.
c. A comparison statement using more than requiring subtraction to solve.
d. A comparison statement using less than requiring subtraction to solve.

3. The amount of each color marker will be observed to check for equal participation.

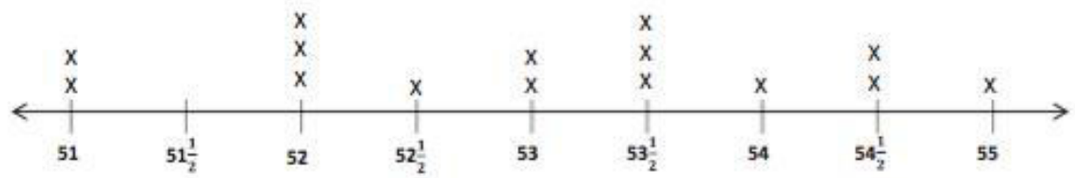


Problem Set

Name _____ Date _____

1. Coach Harris measures the heights of the children on his third-grade basketball team in inches. The heights are shown on the line plot below.

Heights of Children on Third-Grade Basketball Team



a. How many children are on the team? How do you know?

b. How many children are less than 53 inches tall?

c. Coach Harris says that the most common height for the children on his team is $53\frac{1}{2}$ inches. Is he right? Explain your answer.

d. Coach Harris says that the player who does the tip-off in the beginning of the game has to be at least 54 inches tall. How many children could do the tip-off?

Debrief

Using your answers from Problems1(a) and (b), what subtraction sentence could you use to find the number of children who are at least 53 inches tall?

How many half inches does the child who is 52 inches tall need to grow to be tall enough to do the tip-off?

Debrief

What is the most frequent length of the worms in Problem 2? How do you know?

Whatkindofdatacanbeshownonalineplot with fractions? Are there any limitations?

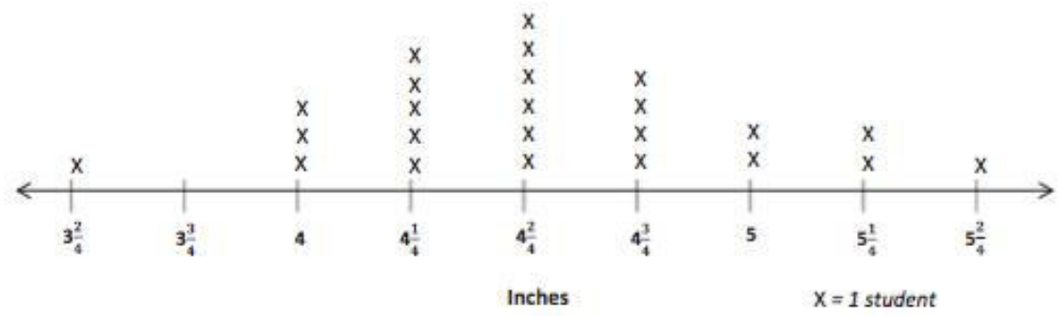
How did the Application Problem prepare you for today's lesson?

Exit Ticket (3 minutes)

Name _____ Date _____

Ms. Bravo measures the lengths of her third-grade students' hands in inches. The lengths are shown on the line plot below.

Lengths of Hands of Third-Grade Students



a. How many students are in Ms. Bravo's class? How do you know?

b. How many students' hands are longer than $4\frac{2}{4}$ inches?

c. Darren says that more students' hands are $4\frac{2}{4}$ inches long than 4 and $5\frac{1}{4}$ inches combined. Is he right? Explain your answer.