LESSON MAKER PRO

Data Detectives

Read, organize, and use data displays.

GRADE 4 · TEKS 4.9

4.9 "Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to: represent data on a frequency table, dot plot..."

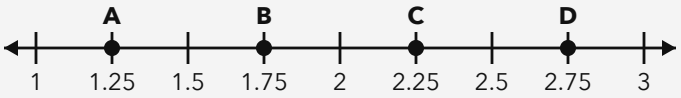
NAME _____ **DATE** _____

COUNT, THEN COMPARE

A data display helps you see how often each value occurs. Count each data value once, then use the display to add, compare, or find a difference. Check that your totals match the data.

WORKED EXAMPLE

The number line shows miles walked by four hikers. How many hikers walked 2 1/4 miles or more?



1. Find 2 1/4 on the number line.
2. Count points at 2 1/4 or to its right.
3. There are 2 points.

Answer: 2 hikers

PRACTICE 4 problems

1 A basketball team recorded free throws made in six practice rounds: 5, 7, 5, 9, 7, 5. Make a frequency table. Which result occurred most often?

ANSWER _____

2 A game designer timed four level tests: 3.6, 4.2, 3.6, and 4.8 minutes. How many tests lasted 3.6 minutes?

ANSWER _____

3 At a snack survey, students chose 3/8, 5/8, 3/8, 7/8, and 3/8 pound bags. What bag size was chosen most often?

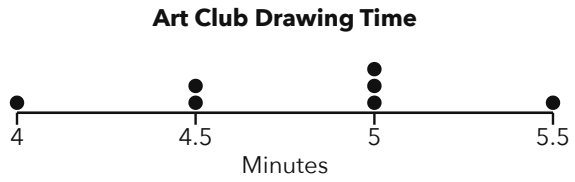
ANSWER _____

4 A librarian tracked books checked out each hour: 12, 14, 12, 16, 14, 12. Use a frequency table. How many more hours had 12 books than 14 books?

ANSWER _____

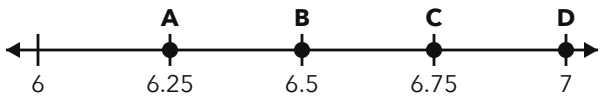
APPLY IT Show your work

1 The dot plot shows minutes spent drawing at art club. The club gives a sticker to each student who drew for 4 1/2 or 5 minutes. How many stickers are needed?



ANSWER

2 The number line shows miles walked by four players in a fitness game. How much farther did the farthest player walk than the nearest player?



ANSWER

CHALLENGE One step up

A pet shelter recorded dog weights in pounds: 21.4, 21.8, 22.1, 22.1, 22.7, 23.0. Make a stem-and-leaf plot with whole-number stems and tenths leaves. Find the range and explain how the plot helped you find it.

WORK SPACE AND ANSWER

ANSWER KEY

Data Detectives

GRADE 4 · TEKS 4.9

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A basketball team recorded free throws made in six practice rounds: 5, 7, 5, 9, 7, 5. Make a frequency table. Which result occurred most often?	**Frequency table: 5 → 3 rounds, 7 → 2 rounds, 9 → 1 round. Most common: 5 free throws (3 rounds).**
2	A game designer timed four level tests: 3.6, 4.2, 3.6, and 4.8 minutes. How many tests lasted 3.6 minutes?	**2 tests**
3	At a snack survey, students chose 3/8, 5/8, 3/8, 7/8, and 3/8 pound bags. What bag size was chosen most often?	**3/8 pound, 3 times**
4	A librarian tracked books checked out each hour: 12, 14, 12, 16, 14, 12. Use a frequency table. How many more hours had 12 books than 14 books?	**Frequency table: 12 → 3 hours, 14 → 2 hours, 16 → 1 hour. Difference: 3 - 2 = 1 hour.**

PART 2 · APPLY IT

1. **5 stickers** Count the dots at 4 1/2 minutes and at 5 minutes. Add 2 and 3.
2. **3/4 mile** Use the leftmost and rightmost points. Subtract 6 1/4 from 7.

CHALLENGE

21 | 4 8; 22 | 1 1 7; 23 | 0. Range: 1.6 pounds. The ordered plot shows the least weight, 21.4, and the greatest weight, 23.0.

Accept frequency tables in any clear order with correct counts. Accept 0.75 mile as equivalent to 3/4 mile, and accept an equivalent correctly ordered stem-and-leaf plot.