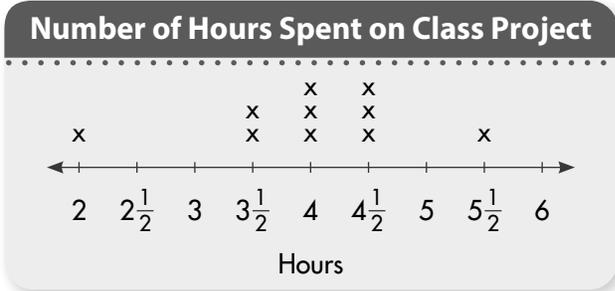


Additional Practice 10-3

Solve Word Problems Using Measurement Data

Another Look!

Mr. Culver made a line plot to show the number of hours students worked on a class project. What was the total number of hours that the students worked?



Remember, each X represents one student.



Use the line plot to make a frequency table.

Multiply each number of hours by its frequency. The product is the total amount for that value.

Add the products.

$$2 + 7 + 12 + 13\frac{1}{2} + 5\frac{1}{2} = 40$$

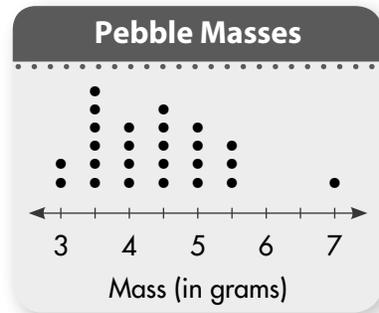
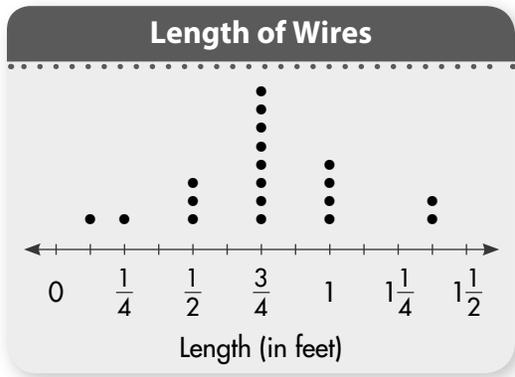
The students spent a total of 40 hours on the project.

Hours	Frequency	Multiplication
2	1	$1 \times 2 = 2$
$3\frac{1}{2}$	2	$2 \times 3\frac{1}{2} = 7$
4	3	$3 \times 4 = 12$
$4\frac{1}{2}$	3	$3 \times 4\frac{1}{2} = 13\frac{1}{2}$
$5\frac{1}{2}$	1	$1 \times 5\frac{1}{2} = 5\frac{1}{2}$

In 1 and 2, use each line plot to answer the question.

1. Wai recorded the length of each wire needed for a science project. What is the total length of wire needed?

2. Trey measured the mass of some pebbles. What is the combined mass of the pebbles that are $4\frac{1}{2}$ grams or more?



$14\frac{5}{8}$ feet

66 grams



In 3 and 4, Dominick's class flew toy gliders. He recorded the flight distances in a line plot.

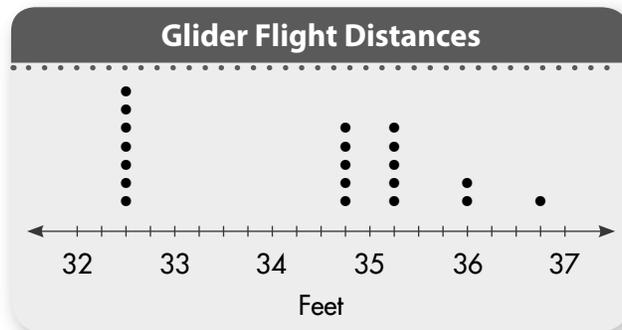
3. What is the difference between the longest and shortest distances the gliders flew?

$4\frac{1}{4}$ feet

4. Did more gliders fly farther or shorter than 35 feet? Explain. **12 flew shorter than**

35 feet: 7 flew $32\frac{1}{2}$ feet and 5 flew

$34\frac{3}{4}$ feet. 8 flew farther than 35 feet: 5 flew $35\frac{1}{4}$ feet, 2 flew 36 feet, and 1 flew $36\frac{3}{4}$ feet. More flew shorter than 35 feet.



5. **enVision**® STEM On June 1, 2013, the number of hours of daylight in Anchorage, Alaska was $18\frac{1}{4}$ hours. What was the number of hours without daylight? **$5\frac{3}{4}$ hours**

6. **Number Sense** How could you estimate the quotient $162 \div 19$?

Sample answer: Use compatible numbers: $160 \div 20 = 8$

7. **Reasoning** Nolan listed the weights of oranges in a box in the frequency table. Which is greater, the total weight of the 6.25-ounce oranges or the total weight of the 7.25-ounce oranges? How much more? Explain.

The 6.25-oz oranges weigh 16 oz more. $6.25 \times 13 = 81.25$ and $7.25 \times 9 = 65.25$; $81.25 > 65.25$; $81.25 - 65.25 = 16$

Weight (in ounces)	Frequency	Multiplication
6.25	13	?
6.5	16	$16 \times 6.5 = 104$
6.75	20	$20 \times 6.75 = 135$
7.0	14	$14 \times 7.0 = 98$
7.25	9	?

Assessment Practice

8. Anita recorded the amount of rainfall each day for 14 days. What was the total amount of rainfall in the 14 days?

- (A) $6\frac{7}{8}$ in.
 (B) $4\frac{1}{2}$ in.
 (C) $3\frac{3}{8}$ in.
 (D) $\frac{1}{8}$ in.

