

Lesson 2 Application Problem

The chart shows the lengths of straws measured in Mr. Han's class.

Straw Lengths (in Inches)				
✓ 3	✓ 4	✓ $4\frac{1}{2}$	✓ $2\frac{3}{4}$	✓ $3\frac{3}{4}$
✓ $3\frac{3}{4}$	✓ $4\frac{1}{2}$	✓ $3\frac{1}{4}$	✓ 4	✓ $4\frac{3}{4}$
✓ $4\frac{1}{4}$	✓ 5	✓ 3	✓ $3\frac{1}{2}$	✓ $4\frac{1}{2}$
✓ $4\frac{1}{2}$	✓ 4	✓ $3\frac{1}{4}$	✓ 5	✓ $4\frac{1}{4}$

a. How many straws were measured? Explain how you know.

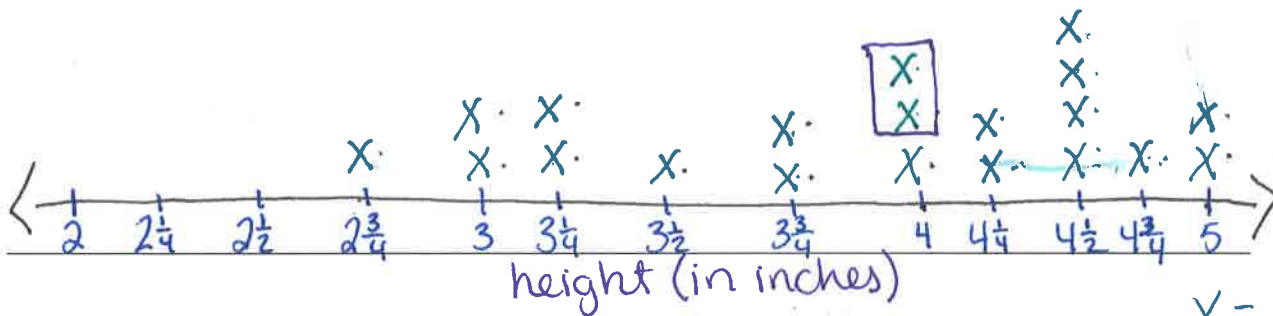
1 x is equal to 1 straw and there are 20 xs

b. What is the smallest measurement on the chart? The greatest?

The smallest measurement is $2\frac{3}{4}$ inches. The greatest measurement is 5 inches.

c. Were the straws measured to the nearest inch? How do you know? No—because there are fractions.

Straw Lengths



X = 1 straw

mode: most frequent - $4\frac{1}{2}$

median: $\frac{(4+4)}{2} = \frac{8}{2} = 4$

outlier: outside the group - no

range: subtract largest - smallest

Read X Draw X

$$5 - 2\frac{3}{4} = 2\frac{1}{4}$$

Write

$$5 - 2\frac{3}{4}$$

$$3 - \frac{3}{4}$$

$$2 + \frac{4}{4} - \frac{3}{4} = 2\frac{1}{4}$$

$$20 \div 2 = 10$$

Lesson 2 Problem Set

Name _____

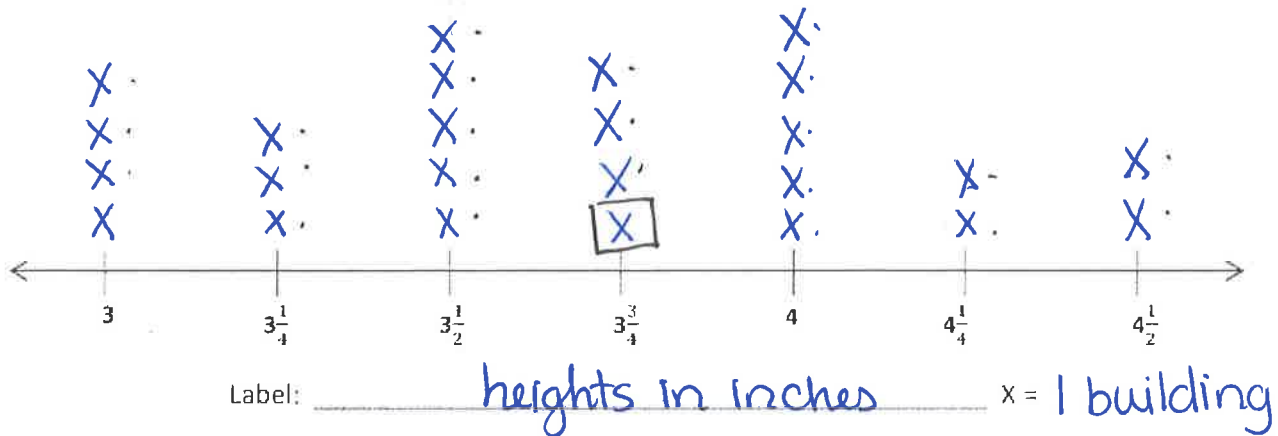
Date _____

Mrs. Felter's students build a model of their school's neighborhood out of blocks. The students measure the heights of the building to the nearest $\frac{1}{4}$ inch and record the measurement as shown below.

Heights of Buildings (in Inches)				
$3\frac{1}{4}$ ✓	$3\frac{3}{4}$ ✓	$4\frac{1}{4}$ ✓	$4\frac{1}{2}$ ✓	$3\frac{1}{2}$ ✓
4 ✓	3 ✓	$3\frac{3}{4}$ ✓	3 ✓	$4\frac{1}{2}$ ✓
3 ✓	$3\frac{1}{2}$ ✓	$3\frac{3}{4}$ ✓	$3\frac{1}{2}$ ✓	4 ✓
$3\frac{1}{2}$ ✓	$3\frac{1}{4}$ ✓	$3\frac{1}{2}$ ✓	4 ✓	$3\frac{3}{4}$ ✓
3 ✓	$4\frac{1}{4}$ ✓	4 ✓	$3\frac{1}{4}$ ✓	4 ✓

a. Use the data to complete the line plot below.

Title: Heights of Buildings



b. How many buildings are $4\frac{1}{4}$ inches tall?

2 buildings are $4\frac{1}{4}$ in. tall.

c. How many buildings are less than $3\frac{1}{2}$ inches?

7 buildings are less than $3\frac{1}{2}$ in.

d. How many buildings are in the class model? How do you know?

25 because every X is 1 building and there are 25 xs

e. Is there an outlier? no If so, what is the outlier? X

f. What's the median ~~length of hands of third grade students?~~

$3\frac{3}{4}$

g. What's the range of the data set?

$4\frac{1}{2} - 3 = 1\frac{1}{2}$

h. Brook says most buildings in the model are at least 4 inches tall. Is she correct? Explain your thinking.

No, because there are more buildings less than 4 in, than at least 4 inches.