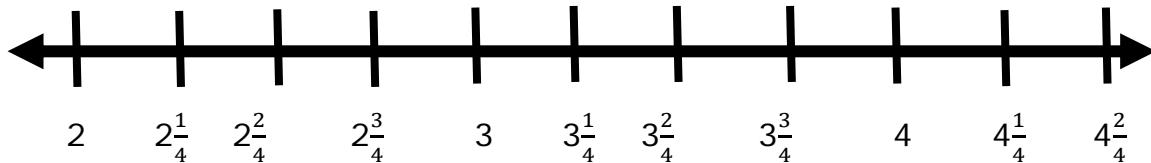


Measurements in Fractions of a Unit - Step-by-Step Lesson

Lesson 1 Measurements in Fractions of a Unit:

A group of students measured their index fingers to the nearest $\frac{1}{4}$ inch. This helped make the data easier to plot. The data can be found below. Display the data on the numbers line plot below. Then answer the questions below the line plot.

1. Justin 4	4. Samantha $3\frac{1}{4}$	7. Joshua $3\frac{2}{4}$
2. Robert $3\frac{1}{4}$	5. Brittany $2\frac{1}{2}$	8. Brian $4\frac{1}{4}$
3. John $3\frac{1}{4}$	6. Amanda $2\frac{1}{4}$	9. Joseph $3\frac{3}{4}$



Questions:

- What is the size difference between the longest and shortest finger?
- What is the most common finger size?
- How many measurements are less than $3\frac{1}{2}$ inches?

Explanation:

a) As we can see on number line the longest finger is $4\frac{1}{4}$ and the shortest finger is $2\frac{1}{4}$.

a2) Now to find the difference between the longest and shortest finger.

Subtract the shortest finger i.e. $2\frac{1}{4}$ from the longest finger i.e. $4\frac{1}{4}$

Take L.C.M of

Denominators to subtract fractions



Name _____

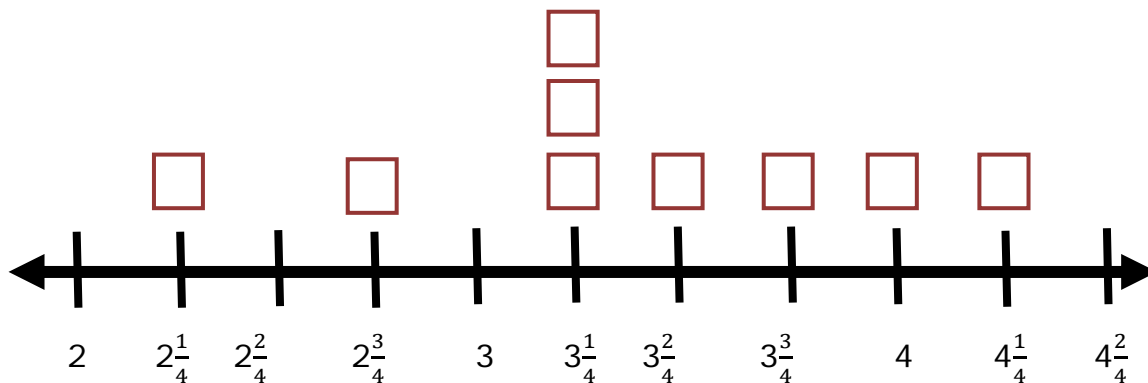
Date _____

$$4\frac{1}{4} - 2\frac{1}{4} = \frac{17-9}{4} = \frac{8}{4} \text{ that is equal to 2.}$$

So the difference between the longest and shortest finger is 2 inches.

b) Observe the number line. We can clearly see that the most blocks are lying on $3\frac{1}{4}$

So the most common finger size is $3\frac{1}{4}$



c) Look at the number line carefully. $3\frac{2}{4}$ is $3\frac{1}{2}$ (in lowest terms)

So count all blocks which are less than $3\frac{2}{4}$

The answer is 5

