Topic #

Lines, Segments and Measurement on a Ruler

Date

Warmup: Answer the warmup questions **before** watching the video solutions.

1. Calculate: $10\frac{12}{20} - 6\frac{1}{20}$

2. Calculate: $14\frac{5}{12} + 8\frac{1}{9}$

3. Calculate: $10\frac{10}{21} - 5\frac{6}{7}$

I. Points, Lines, Segments

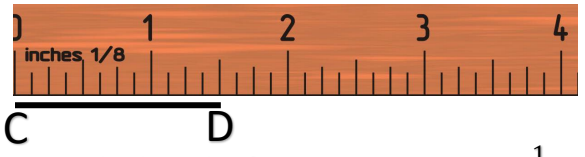
Point: A point tells a location. It has no size.

Line: A line is a set of points that extend in both directions without end. Only two points are needed to define a line.

Line AB continues in both directions without end. Symbolically written: $\overleftrightarrow{AB}$

Line Segment: A line segment, or segment, is a part of a line. It is referred to by the end points.

The distance of Line Segment AB can be measured. Symbolically written: $\overline{AB}$

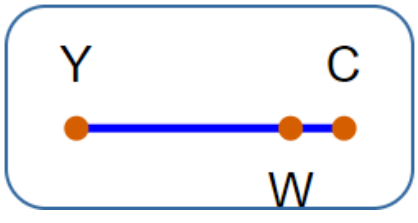


The length of Line Segment CD is $1\frac{1}{2}$ inches.

Calculate the Length of the Segment:

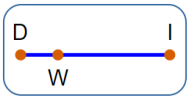
1. Label the lengths of the known segments.
2. Determine if you need to add or subtract the given amounts.
3. Calculate the answer.
4. Simplify the answer.
5. Check that the answer makes sense.

$\overline{YW} = \frac{4}{6}$ and $\overline{WC} = \frac{1}{6}$, find the length of $\overline{YC}$.



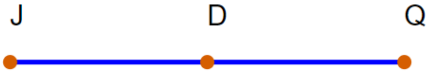
$\frac{4}{6} + \frac{1}{6} =$

$\overline{DI} = \frac{12}{15}$ and $\overline{DW} = \frac{3}{15}$, find the length of $\overline{WI}$.

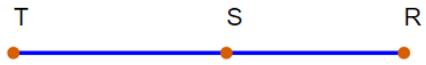


$\frac{12}{15} - \frac{3}{15} =$

$\overline{AB} = 8\frac{10}{15}$ and $\overline{AD} = 4\frac{3}{13}$, find the length of $\overline{BD}$.



4. $\overline{TR} = 11\frac{7}{16}$ and $\overline{TS} = 6\frac{1}{8}$, find the length of $\overline{SR}$.



5. $\overline{PN} = 39\frac{12}{25}$ and $\overline{NH} = 9\frac{3}{20}$, find the length of $\overline{PH}$.

II. Practice: