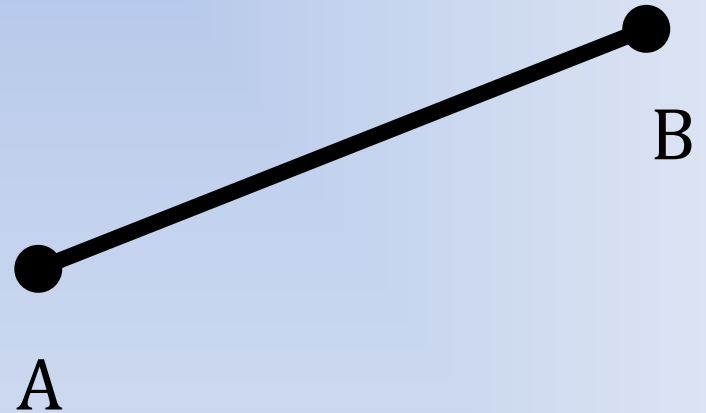


1-2 Linear Measure

Moving Beyond Undefined Terms

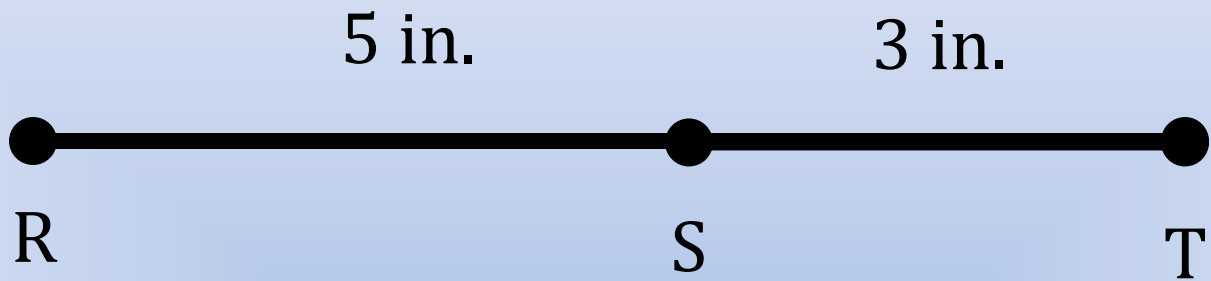
Line segment or 'segment'

- Has two endpoints
- Can be measured!
- Named by: two endpoints
- Notation:
- Always includes a **unit of measure!**

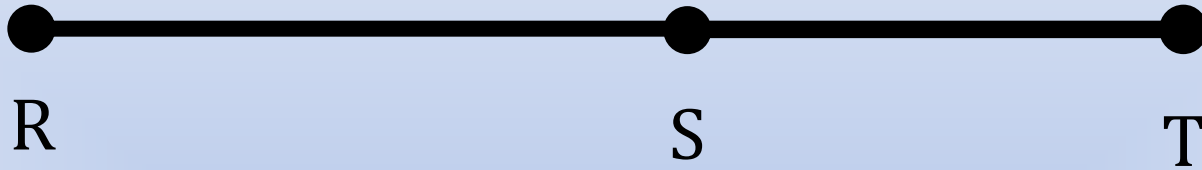


Measuring Segments

- All measures are *real numbers*, so we can perform *mathematical operations* with them.
- Points that are *between* other points give us a point of reference for our calculations.



How long is segment RT?



- If $RT = 12$ ft. and $ST = 5$ ft., what is RS ?
- If $RS = 5x - 3$ and $ST = 7x$, and $RT = 45$, find x , RS , and ST .

Congruent Segments

- Segments are **congruent** if they have exactly the same measure.

Draw two congruent segments in your notes.

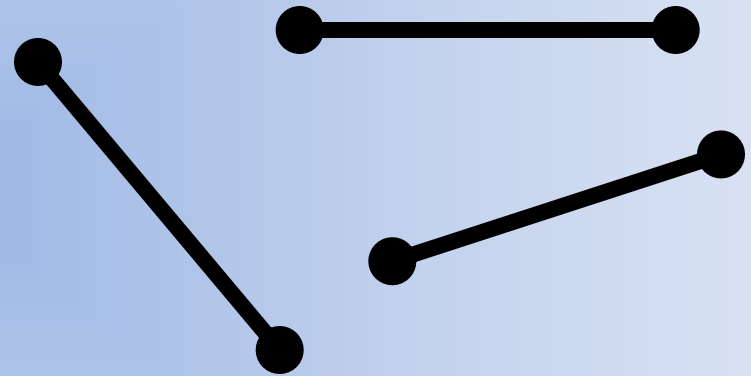
- Do these segments appear to be congruent?

- Why?
- Why not?



- Do these segments appear to be congruent?

- Why?
- Why not?



- How can you be absolutely certain they are/aren't congruent?

Notation

- If we want to show on a diagram that two or more segments are congruent, we use *hashmarks*. Segments with the same number of marks are congruent one to the other.

Notation

- The symbol \cong is used to state that segments are congruent, as in:

Practice

Page 17: # 7- 11 in your notes

Homework

Section 1-2

#22 – 27: draw the segment, show setup and arithmetic

#28 – 33: draw each segment, show setup and arithmetic

#34 – 39: don't draw, but justify answer using words