

(\cong) Congruent World

NO NUMBERS

$$\overline{AB} \cong \overline{XY}$$

EXACT, SAME

$$\angle A \cong \angle B$$

Congruent WORLD

$$\overline{AB} \cong \overline{CD}$$

equal world

$$AB = CD$$

$$\angle A \cong \angle B$$

$$m\angle A = m\angle B$$

Pieces/parts

MEASURE

(=) Equal World

measurements

algebra topics.

$$\begin{array}{l} AB = 5 \\ DE = xy \end{array} \left\{ \begin{array}{l} m\angle A = 32^\circ \\ m\angle ABC = m\angle PQR \end{array} \right.$$

Mismatched Worlds

$$\angle A = m\angle B$$

Put in correct world
 $m\angle A = m\angle B$ (equal)
 $\angle A \cong \angle B$ (congruent)

$$AB \cong CD$$

$$AB = CD$$

(equal)

$$\overline{AB} \cong \overline{CD}$$

(congruent)

$AB \rightarrow$ ① the length from
 pt. A to pt. B.
 ② the measure of \overline{AB}
 ③ distance from pt A
 to pt B

How do I go from one world to another...

Use the Definition of Congruent Segments!!!

Given: $\overline{AB} \cong \overline{CD}$

Statement	Reason
① $\overline{AB} \cong \overline{CD}$	Given
② $AB = CD$	def of \cong segments