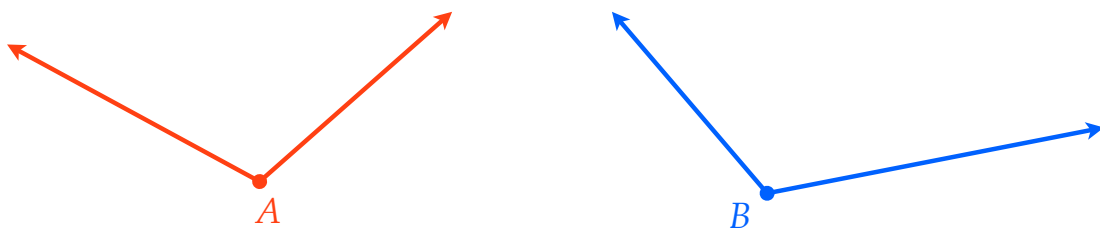


## Definition of Congruent Angles

Two angles are congruent angles if and only if their measures are equal

If two angles are congruent angles, then their measures are equal

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

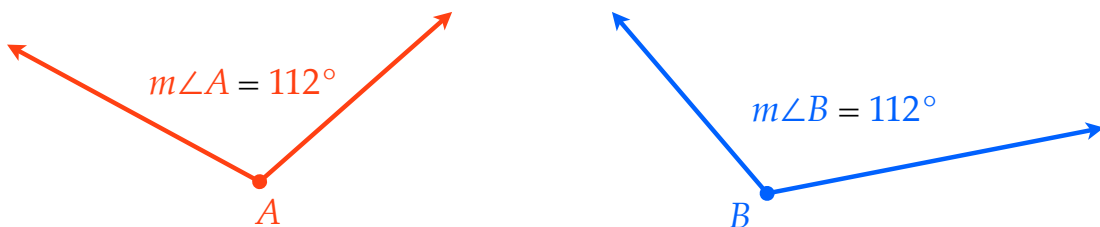


## Definition of Congruent Angles

Two angles are congruent angles if and only if their measures are equal

If two angles have measures that are equal, then those two angles are congruent angles

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

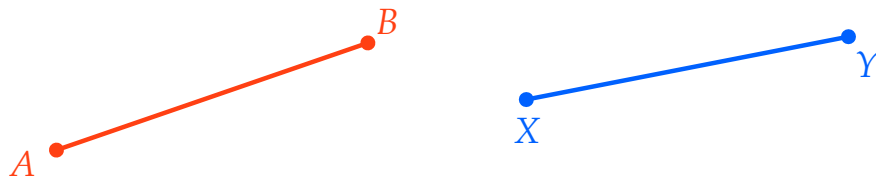


### Definition of Congruent Segments

Two segments are congruent segments if and only if their measures are equal

If two segments are congruent, then their measures are equal

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



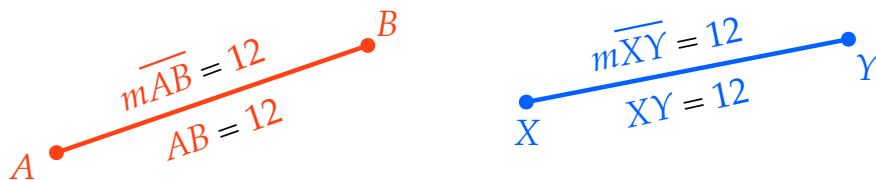
### Definition of Congruent Segments

Two segments are congruent segments if and only if their measures are equal

If two segments have equal measures, then those two segments are congruent

$$m\overline{AB} = m\overline{XY}$$

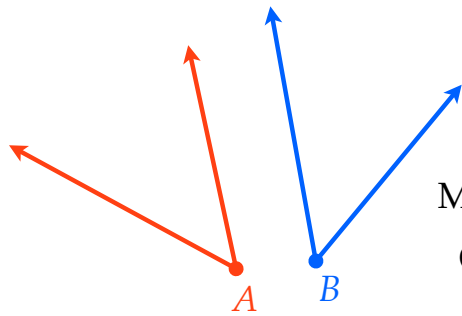
$$AB = XY$$



### Definition of Congruent Angles

If  $\angle A \cong \angle B$ , then  $m\angle A = m\angle B$

If  $m\angle A = m\angle B$ , then  $\angle A \cong \angle B$



Measurements are equal  
Objects are congruent

### Definition of Congruent Segments

If  $\overline{AB} \cong \overline{XY}$ , then  $m\overline{AB} = m\overline{XY}$

If  $m\overline{AB} = m\overline{XY}$ , then  $\overline{AB} \cong \overline{XY}$

