

*A Theorem must be proven

Two-column proof:

- 1.
- 2.

Property	Segments
Reflexive	$AB = AB$
Symmetric	If $AB = CD$, then $CD = AB$.
Transitive	If $AB = CD$ and $CD = EF$, then $AB = EF$.

1. Prove the symmetric property of segment congruence.

Given: $\overline{PQ} \cong \overline{XY}$

Prove: $\overline{XY} \cong \overline{PQ}$

Statements	Reasons

Geometry CP
2.7 Proving Segment Relationships

2. Given:

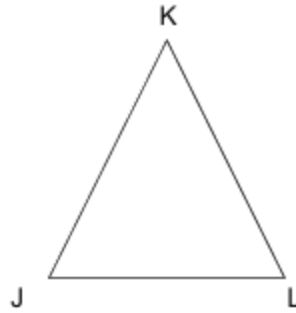
$$LK = 5$$

$$JK = 5$$

$$\overline{JK} \cong \overline{JL}$$

Prove:

$$\overline{LK} \cong \overline{JL}$$

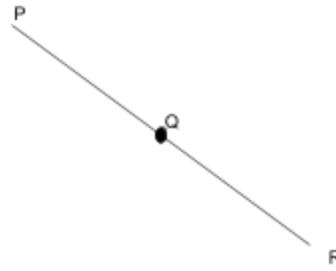


Statements	Reasons

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3.

Given: Q is the midpoint of \overline{PR}
Prove: $PQ = \frac{1}{2}PR$ and $QR = \frac{1}{2}PR$



Statements	Reasons