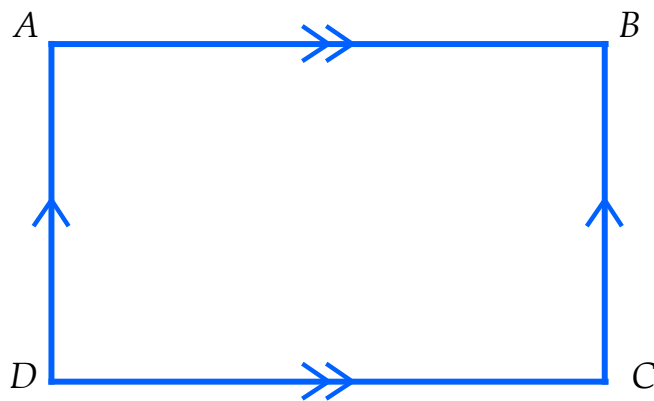


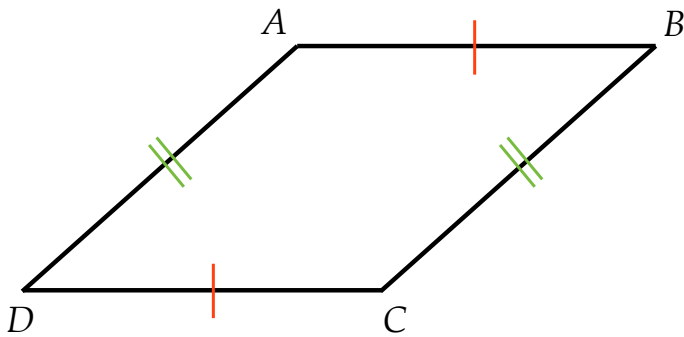
Parallelogram

A **parallelogram** is a quadrilateral with two pairs opposite sides being parallel

$ABCD$ is a **parallelogram**



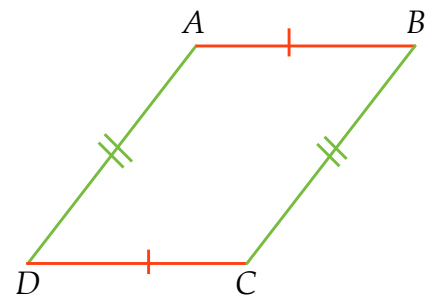
If both pairs of **opposite sides** of a quadrilateral are congruent,
then the quadrilateral is a **parallelogram**.



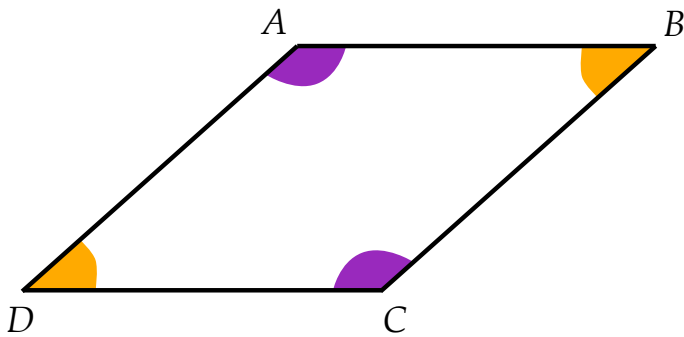
Statements	Reasons

Given: $\overline{AB} \cong \overline{DC}$; $\overline{AD} \cong \overline{BC}$

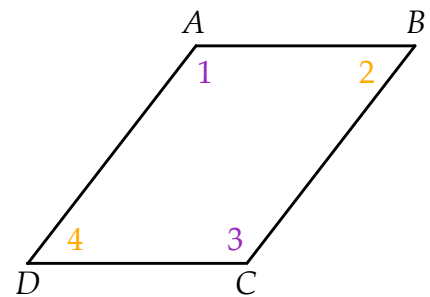
Prove: $ABCD$ is a **parallelogram**



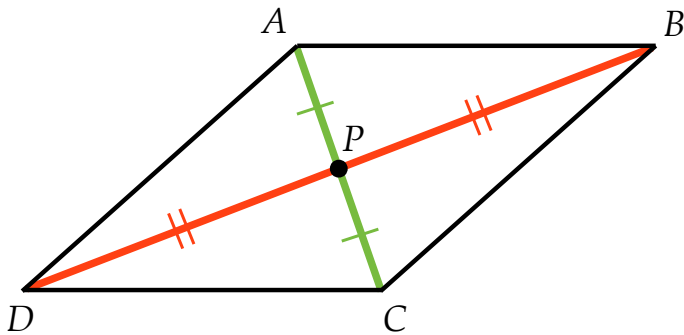
If both pairs of **opposite angles** of a quadrilateral are congruent, then the quadrilateral is a **parallelogram**.



Statements	Reasons
	Given: $\angle 1 \cong \angle 3$; $\angle 2 \cong \angle 4$ Prove: $ABCD$ is a parallelogram



If the diagonals of a quadrilateral bisect each other,
then the quadrilateral is a **parallelogram**.

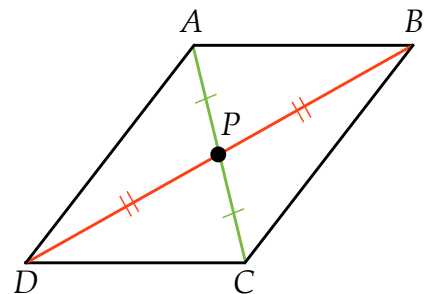


Statements

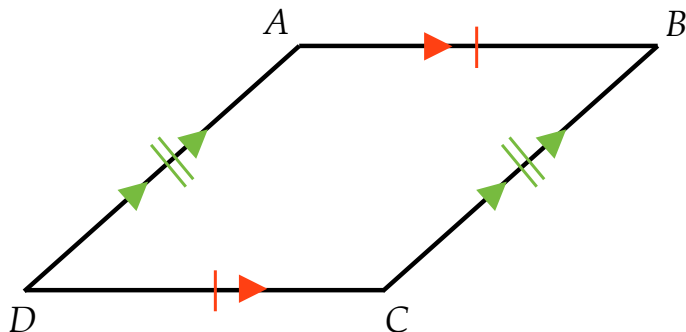
Reasons

Given: $\overline{AC}$ and $\overline{DB}$ bisect
each other at point P

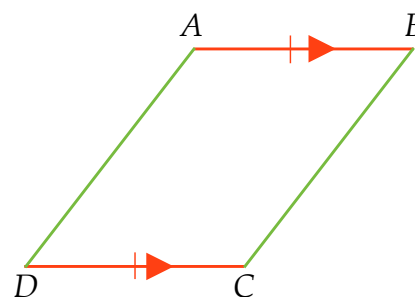
Prove: $ABCD$ is a **parallelogram**



If one pair of **opposite sides** of a quadrilateral is both congruent and parallel, then the quadrilateral is a **parallelogram**.



Statements	Reasons
	Given: $\overline{AB} \cong \overline{DC}$ and $\overline{AB} \parallel \overline{DC}$
	Prove: $ABCD$ is a parallelogram



If both pairs of **opposite sides** of a quadrilateral are congruent,
then the quadrilateral is a **parallelogram**.

If both pairs of **opposite angles** of a quadrilateral are congruent,
then the quadrilateral is a **parallelogram**.

If the diagonals of a quadrilateral bisect each other,
then the quadrilateral is a **parallelogram**.

If one pair of **opposite sides** of a quadrilateral is both congruent and parallel,
then the quadrilateral is a **parallelogram**.