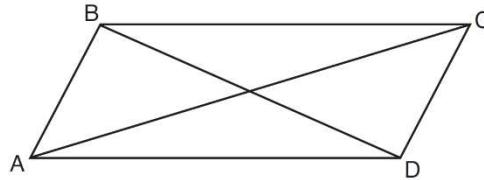


Proving Parallelograms

1. Quadrilateral $ABCD$ with diagonals \overline{AC} and \overline{BD} is shown in the diagram below.

Which information is *not* enough to prove $ABCD$ is a parallelogram?

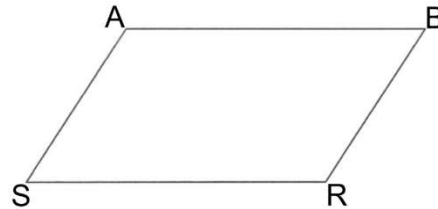
- 1) $\overline{AB} \cong \overline{CD}$ and $\overline{AB} \parallel \overline{DC}$
- 2) $\overline{AB} \cong \overline{CD}$ and $\overline{BC} \cong \overline{DA}$
- 3) $\overline{AB} \cong \overline{CD}$ and $\overline{BC} \parallel \overline{AD}$
- 4) $\overline{AB} \parallel \overline{DC}$ and $\overline{BC} \parallel \overline{AD}$



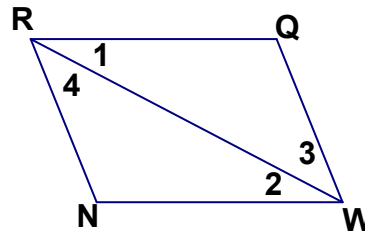
2. Quadrilateral $ABCD$ has diagonals \overline{AC} and \overline{BD} . Which information is *not* sufficient to prove $ABCD$ is a parallelogram?

- 1) \overline{AC} and \overline{BD} bisect each other.
- 2) $\overline{AB} \cong \overline{CD}$ and $\overline{BC} \cong \overline{AD}$
- 3) $\overline{AB} \cong \overline{CD}$ and $\overline{AB} \parallel \overline{CD}$
- 4) $\overline{AB} \cong \overline{CD}$ and $\overline{BC} \parallel \overline{AD}$

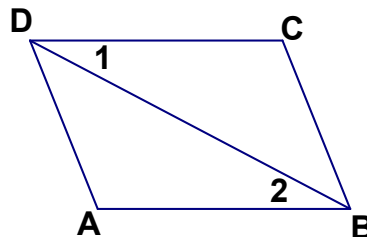
3. Given: $\overline{SA} \cong \overline{BR}$, $\overline{AB} \cong \overline{SR}$
Prove: $SABR$ is a parallelogram



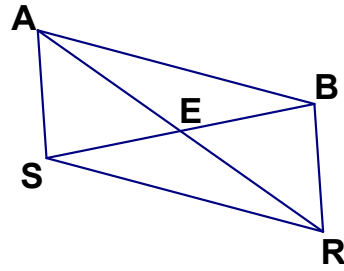
4. Given: $\angle 1 \cong \angle 2$, $\angle 3 \cong \angle 4$
Prove: $NRQW$ is a parallelogram



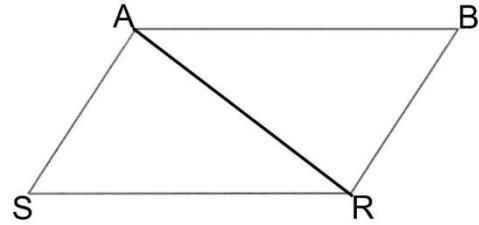
5. Given: $\overline{AB} \cong \overline{CD}$, $\angle 1 \cong \angle 2$
Prove: $ABCD$ is a parallelogram



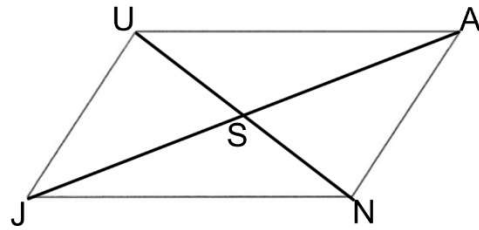
6. Given: E is the midpoint of \overline{SB} , $\overline{AE} \cong \overline{ER}$
 Prove: SABR is a parallelogram



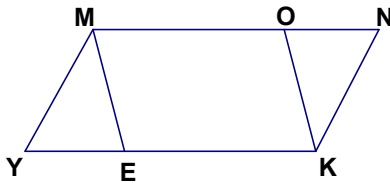
7. Given: $\triangle ASR \cong \triangle RBA$
 Prove: SABR is a parallelogram



8. Given: $\overline{JU} \cong \overline{AN}$, $\overline{AS} \cong \overline{SJ}$
 Prove: JUAN is a parallelogram



9. Given: YMNK is a parallelogram, $\overline{YE} \cong \overline{ON}$
 Prove: MOKE is a parallelogram



10. Given: Quadrilateral ABCD, diagonal \overline{AFEC} , $\overline{AE} \cong \overline{FC}$, $\overline{BF} \perp \overline{AC}$, $\overline{DE} \perp \overline{AC}$, $\angle 1 \cong \angle 2$
 Prove: ABCD is a parallelogram.

