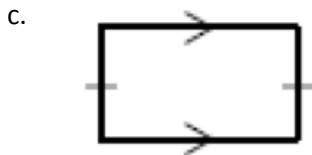
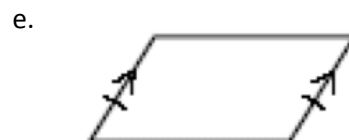
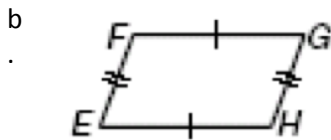
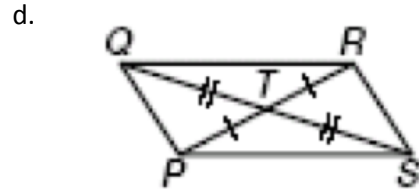
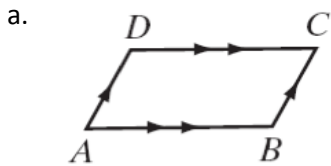


You can show that a quadrilateral is a parallelogram by using any of the conditions listed below.

Conditions for Parallelograms	
<ul style="list-style-type: none"> Both pairs of opposite sides are parallel (definition). One pair of opposite sides is parallel and congruent. Both pairs of opposite sides are congruent. 	<ul style="list-style-type: none"> Both pairs of opposite angles are congruent. The diagonals bisect each other. One angle is supplementary to both its consecutive angles.

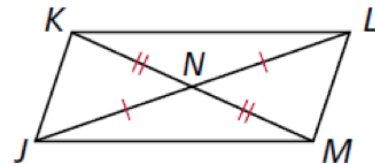
1. Determine whether each quadrilateral must be a parallelogram. Justify your answer.



2. Let's show why a condition can prove we have a parallelogram, by definition.

Given: \overline{JL} and \overline{KM} bisect each other

Prove: LKJM is a parallelogram

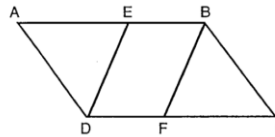


Statements	Reasons

3. Given: ABCD is a parallelogram

$$\overline{AE} \cong \overline{CF}$$

Prove: EBFD is a parallelogram



Statements

Reasons

1. $\overline{AE} \cong \overline{CF}$, ABCD is a parallelogram

1.

2. $\angle BAD \cong$ _____

2.

3. $\overline{AD} \cong$ _____

3.

4. Δ _____ \cong Δ _____

4.

5. $\overline{ED} \cong$ _____

5.

6. $\overline{EB} \cong$ _____

6.

7. $m\overline{AB} =$ _____

7.

8. $m\overline{AE} =$ _____

8.

9. _____ + $m\overline{EB} =$ _____, _____ + _____ = $m\overline{CD}$

9.

10. _____ + _____ = _____ + _____

10. Substitution

11. $m\overline{EB} =$ _____

11.

12. $\overline{EB} \cong$ _____

12.

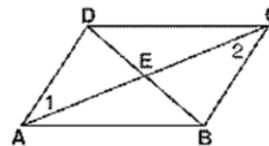
13. EBGD is a _____

13.

4. Given: \overline{DB} bisects \overline{AC}

$$\angle 1 \cong \angle 2$$

Prove: ABCD is a parallelogram



Statements

Reasons