

Aim: How can we use the properties of quadrilaterals for proofs?

Do Now: List the 5 properties of a parallelogram (again !!!):

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_



What makes a rectangle a special type of parallelogram?

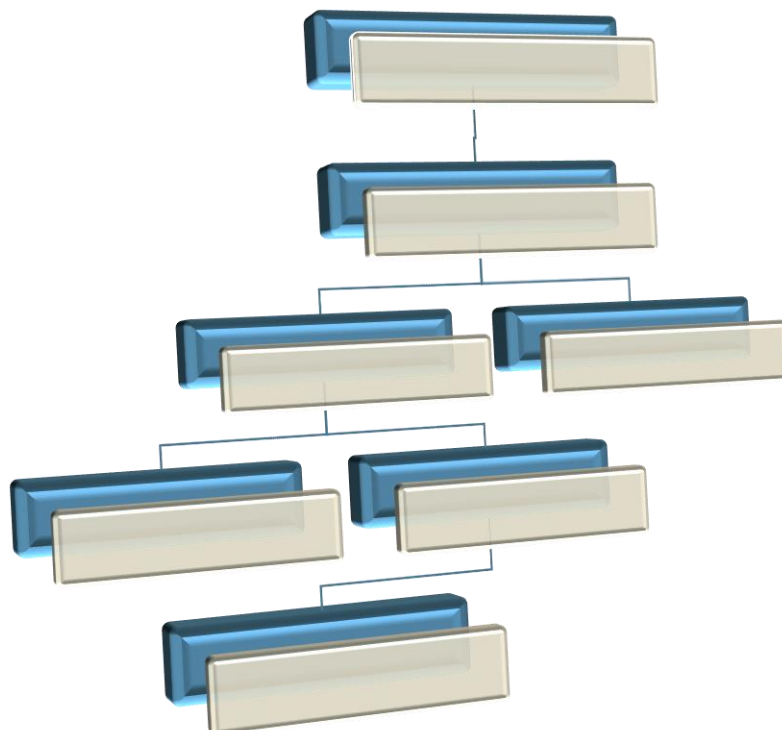
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What makes a rhombus a special type of parallelogram?

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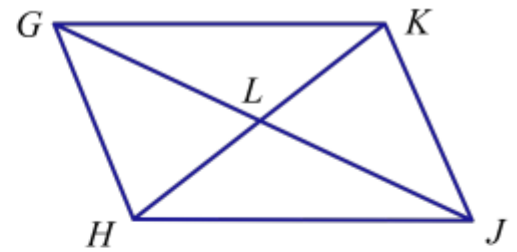
What makes a square a special type of rhombus?

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1.

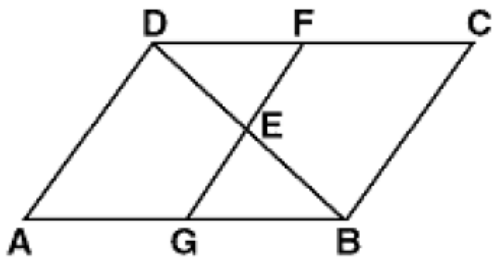
**Given:** Parallelogram GHJK  
**Prove:**  $\triangle GLH \cong \triangle JLK$



**Statements**

**Reasons**

2.

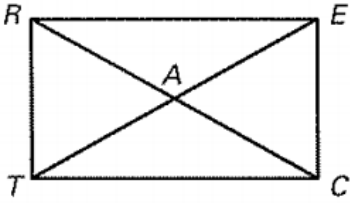


**Given:** ABCD is a parallelogram  
 $\overline{FG}$  bisects  $\overline{DB}$

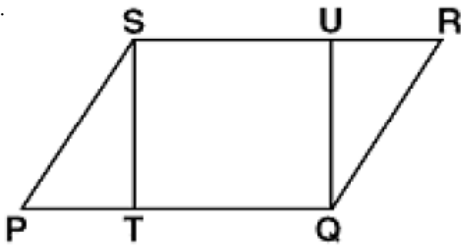
**Prove:**  $\overline{FE} \cong \overline{EG}$

3. **Given:** Rectangle  $RECT$

**Prove:**  $\triangle ART \cong \triangle ACE$



4.



Given: PQRS is a parallelogram

$ST \perp PQ, QU \perp SR$

Prove:  $ST \cong QU$

5. Given: Rhombus ABCD with diagonals meeting at E

Prove:  $\triangle AEB \cong \triangle CEB$

