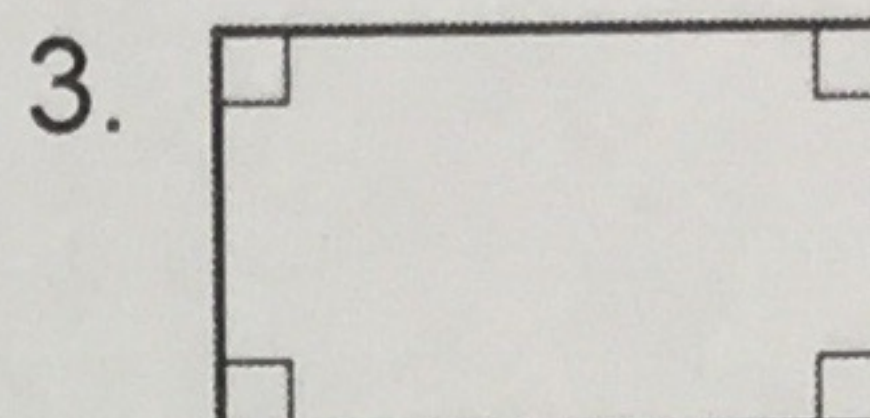
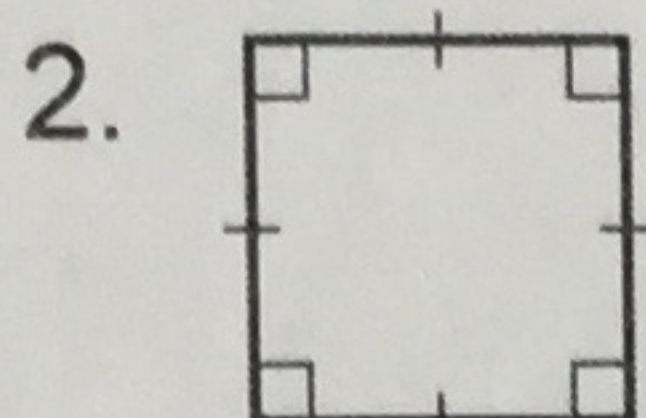
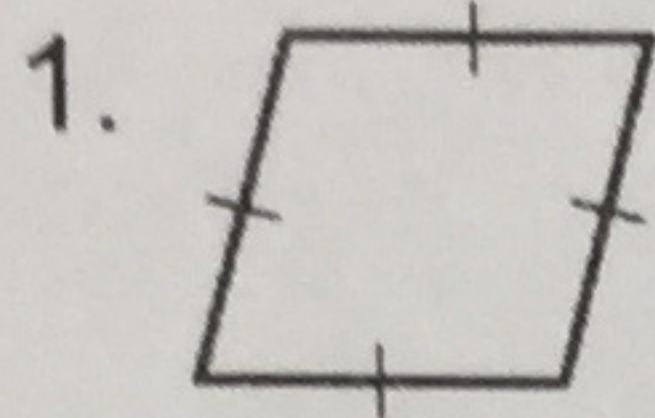


Practice A

Properties of Special Parallelograms

Match each figure with the letter of one of the vocabulary terms.

Use each term once.



- A. rectangle
- B. rhombus
- C. square

rhombus

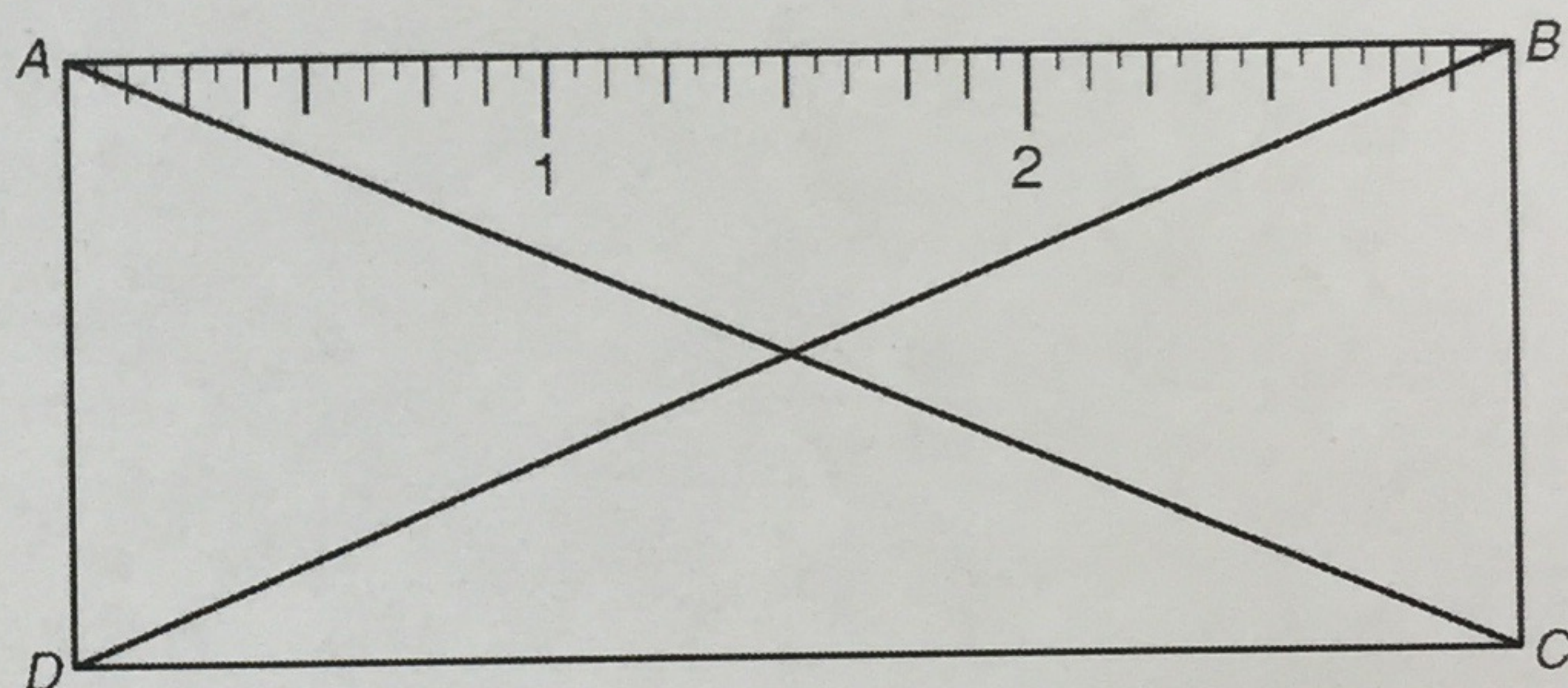
square

rectangle

Fill in the blanks to complete each theorem.

4. If a parallelogram is a rhombus, then its diagonals are perpendicular.
5. If a parallelogram is a rectangle, then its diagonals are congruent.
6. If a quadrilateral is a rectangle, then it is a parallelogram.
7. If a parallelogram is a rhombus, then each diagonal bisects a pair of opposite angles.
8. If a quadrilateral is a rhombus, then it is a parallelogram.

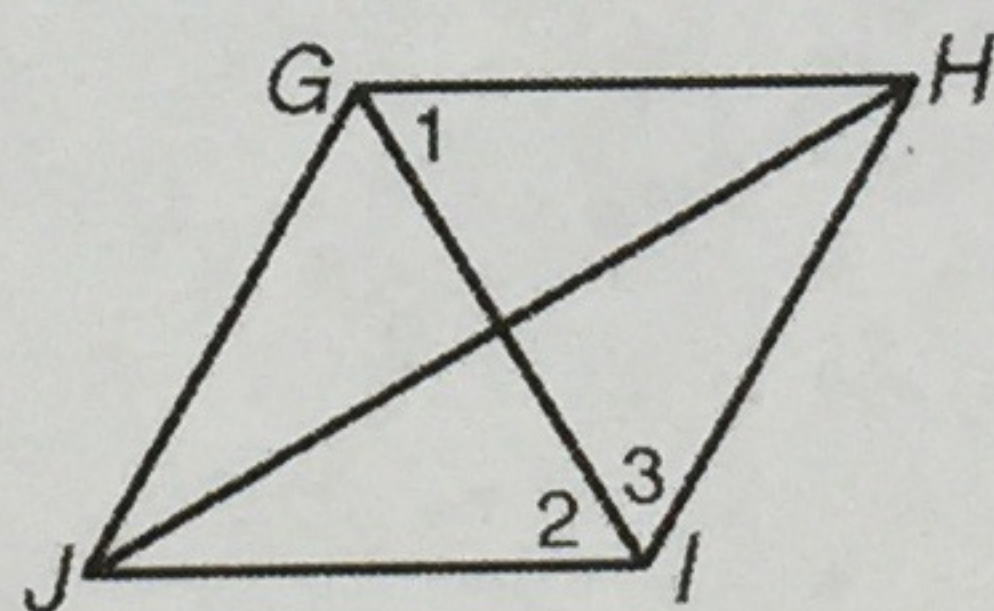
The part of a ruler shown is a rectangle with $AB = 3$ inches and $BD = 3\frac{1}{4}$ inches.



Find each length.

9. $DC =$ 3 in.
10. $AC =$ 3 1/4 in

Use the phrases and theorems from the Word Bank to complete this two-column proof.



Alternate Interior \sphericalangle Thm.
 $GHIJ$ is a parallelogram.
 Trans. Prop. of \cong
 $\angle 2 \cong \angle 3$

11. **Given:** $GHIJ$ is a rhombus.
Prove: $\angle 1 \cong \angle 3$

Statements	Reasons
1. $GHIJ$ is a rhombus.	1. Given
2. a. <u>$GHIJ$ is a parallelogram</u>	2. rhomb. \rightarrow
3. <u>$\overline{GH} \cong \overline{JI}$</u>	3. \rightarrow opp. sides \cong
4. $\angle 1 \cong \angle 2$	4. b. <u>alt. interior \sphericalangles Thm</u>
5. c. <u>$\angle 2 \cong \angle 3$</u>	5. rhomb. \rightarrow each diag. bisects opp. \sphericalangle s
6. $\angle 1 \cong \angle 3$	6. d. <u>Transitive Property</u>