

Chapter 5 Review

Do you know the definitions of ...

Polygon	
Quadrilateral	
Parallelogram	
Rectangle	
Rhombus	
Square	

Do you know the definitions of ...

Polygon	N-segments, each segment intersects 2 other segments at endpoints, no 2 consecutive collinear segments
Quadrilateral	A four-sided polygon.
Parallelogram	A quadrilateral with 2 pairs of parallel opposite sides.
Rectangle	A quadrilateral with 4 congruent angles.
Rhombus	A quadrilateral with 4 congruent sides.
Square	A quadrilateral with 4 congruent sides and 4 congruent angles.

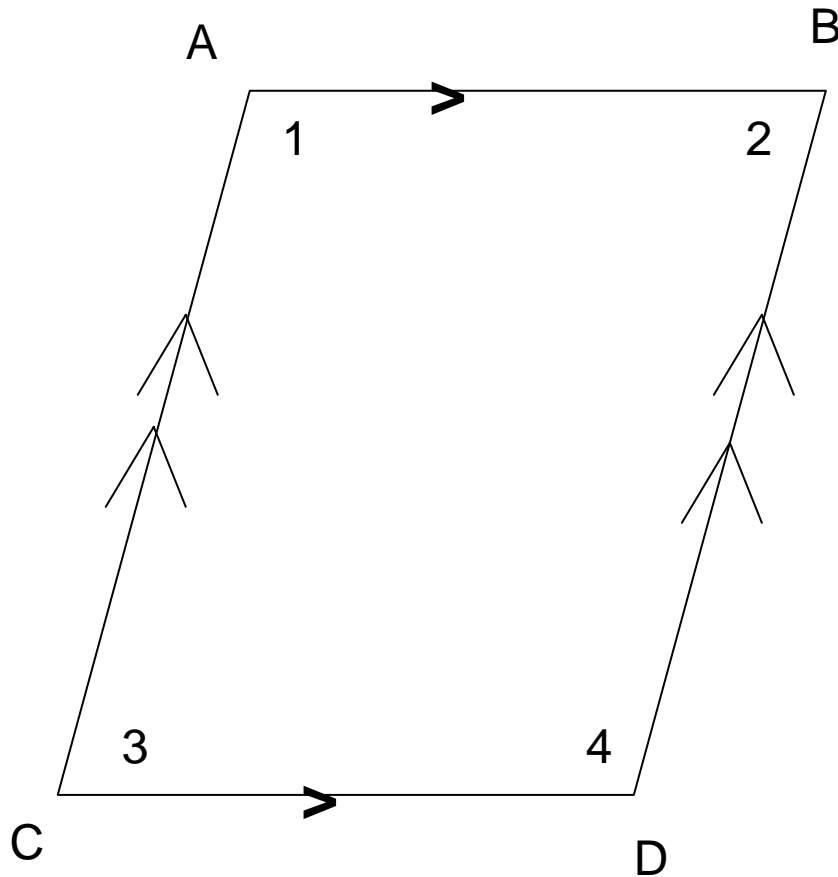
Do you know the definitions of ...

Trapezoid	
Bases of Trapezoid	
Legs of Trapezoid	
Base Angles of Trapezoid	
Median of Trapezoid	
Isosceles Trapezoid	

Do you know the definitions of ...

Trapezoid	A quadrilateral with exactly one pair of parallel sides.
Bases of Trapezoid	sides of trapezoid.
Legs of Trapezoid	Not sides of trapezoid.
Base Angles of Trapezoid	Formed by base and leg.
Median of Trapezoid	Segment joining midpoints of legs.
Isosceles Trapezoid	Trapezoid with congruent legs.

Based on the diagram, what can you conclude about the angles and sides?



$$\overline{AB} \parallel \overline{CD} \quad \overline{AC} \parallel \overline{BD}$$

$$\overline{AB} \cong \overline{CD} \quad \overline{AC} \cong \overline{BD}$$

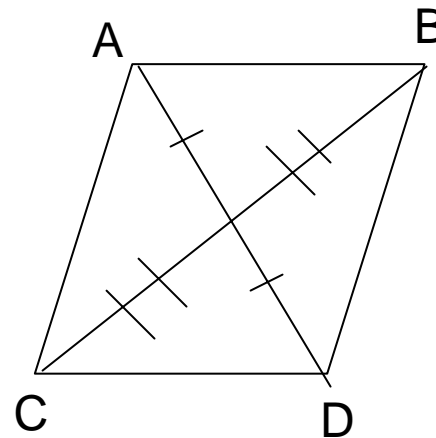
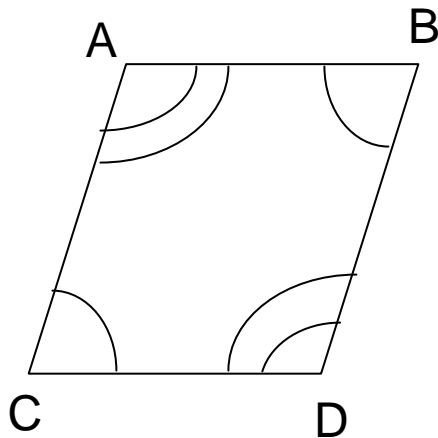
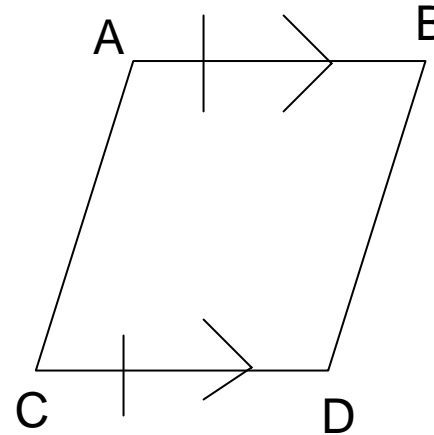
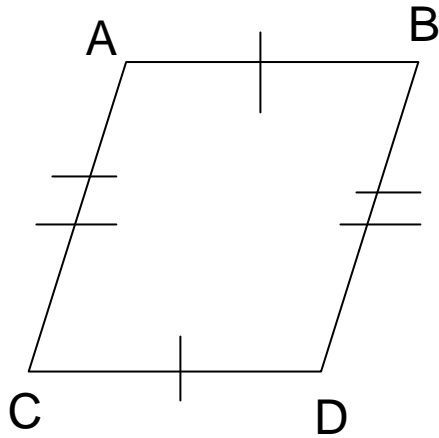
$$\angle 1 \cong \angle 4 \quad \angle 2 \cong \angle 3$$

$$\overline{CB} \text{ bisects } \overline{AD}$$

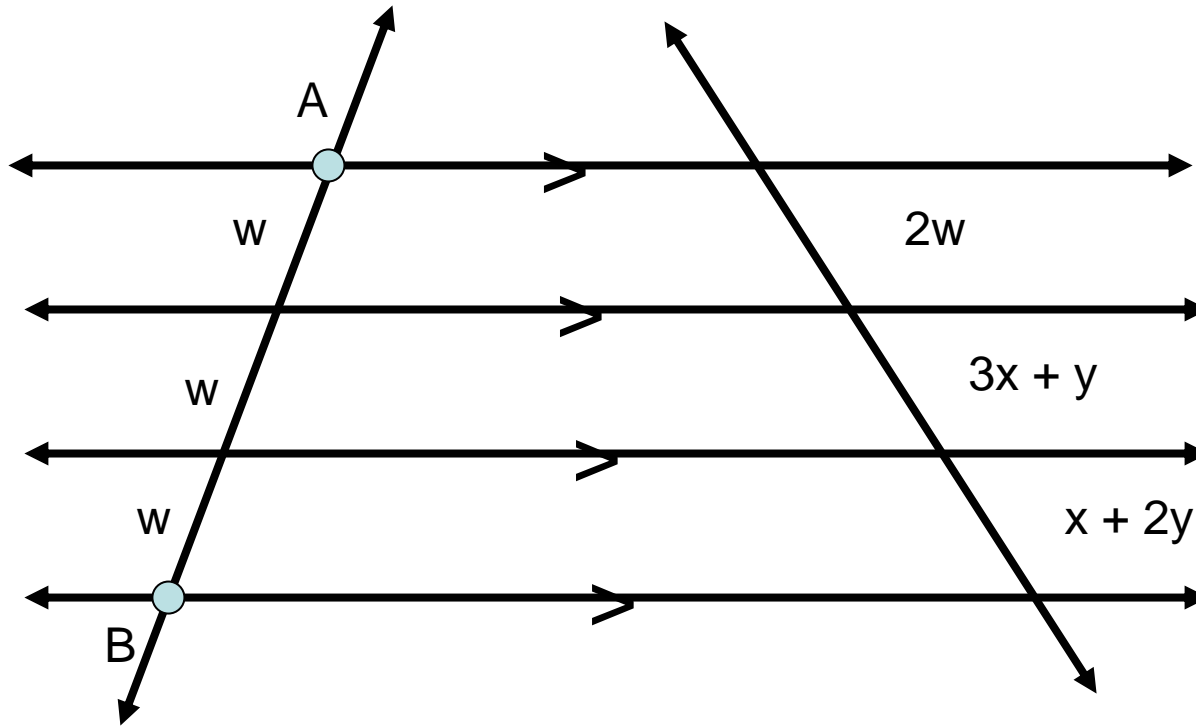
$$\overline{AD} \text{ bisects } \overline{CB}$$

$ABDC$ is parallelogram

Based on the diagram, what can you conclude about the figure?

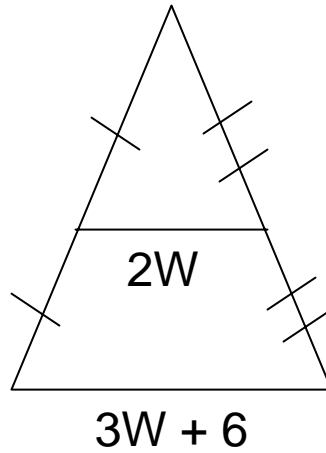
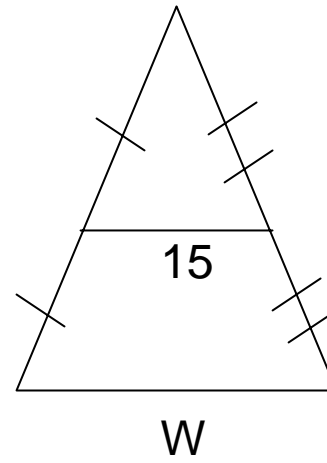
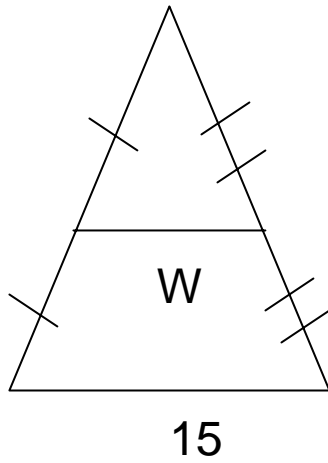


Solve for W, X, Y

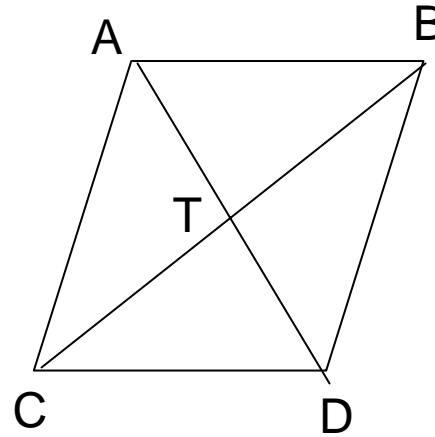
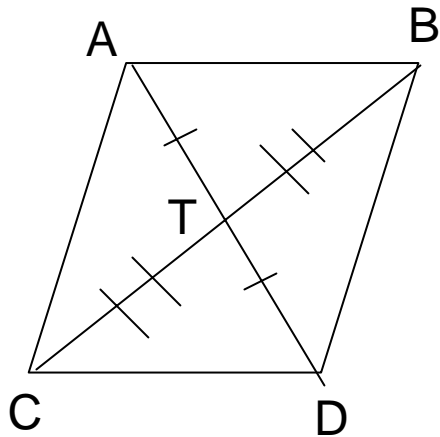


$$AB=15$$

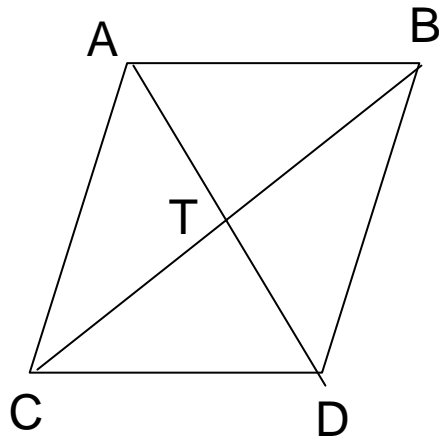
Solve for W



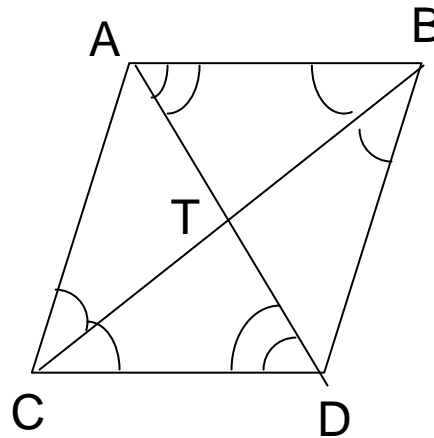
What can you conclude about each figure?



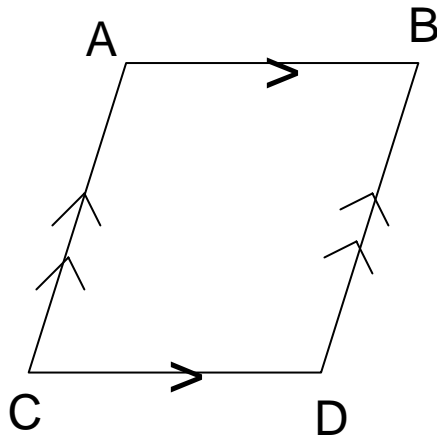
$$\overline{AD} \cong \overline{CB}$$



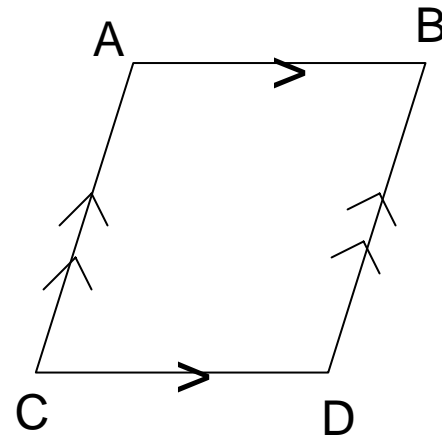
$$\overline{AD} \perp \overline{CB}$$



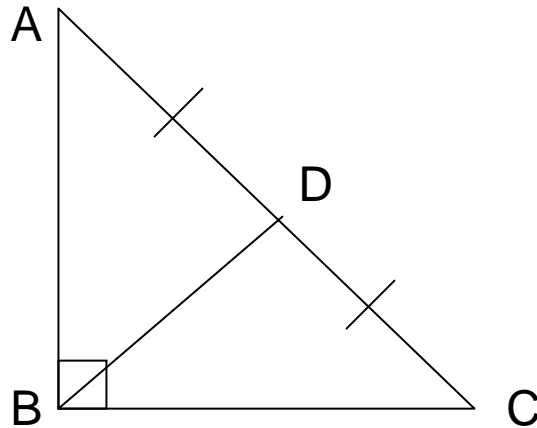
What can you conclude about each figure?



$$\angle A = 90^\circ$$



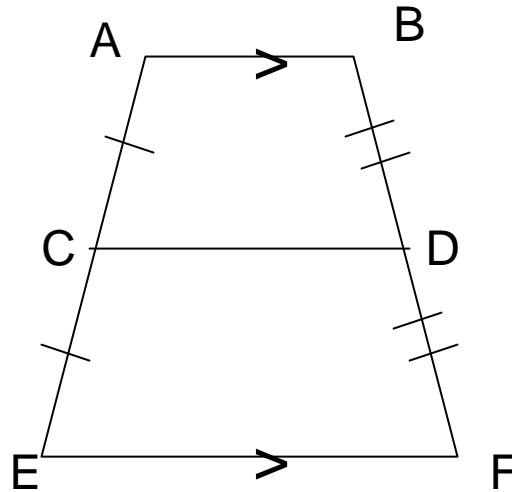
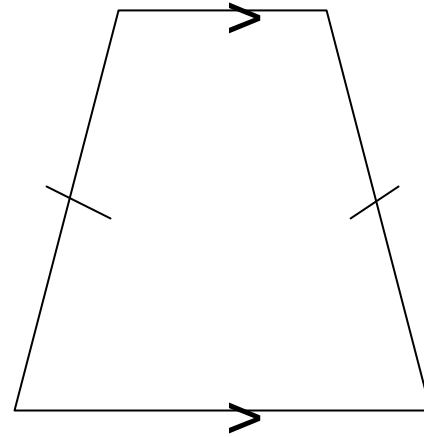
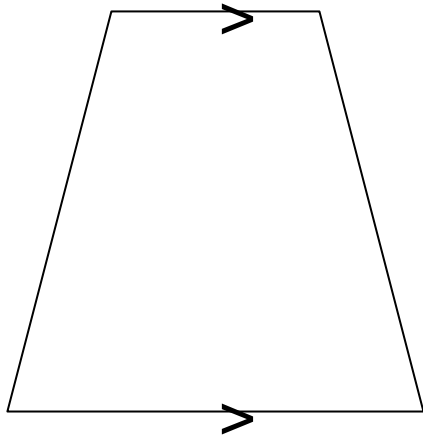
$$\overline{AB} \cong \overline{BD}$$



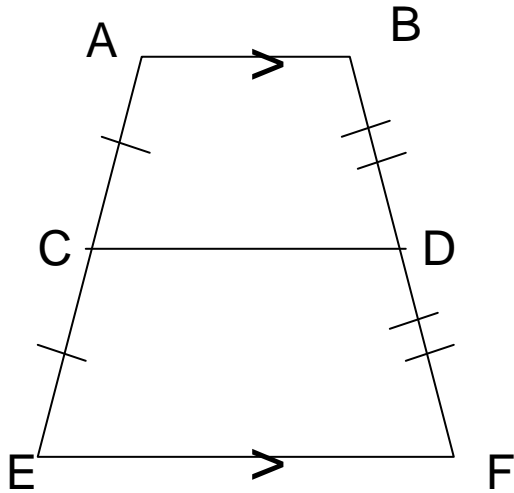
Prove:

- A square is a parallelogram.
- Every square is a rectangle.

What can you conclude about each figure?



Based on the figure, solve for the variable or variables.



$$AB = 12 \quad EF = 22 \quad CD = ?$$

$$AB = 12 \quad EF = ? \quad CD = 22$$

$$AB = x + 1 \quad EF = 4x + 2 \quad CD = 3x$$

Solve for X

$$x^2 + 5x + 4 = 0$$

$$3x^2 + 5x - 2 = 0$$

$$x^2 + x - 7 = 0$$

Solve for X and Y

$$3x + 2y = 17$$

$$x - 2y = -5$$

$$2x - 3y = 11$$

$$3x + 2y = 10$$