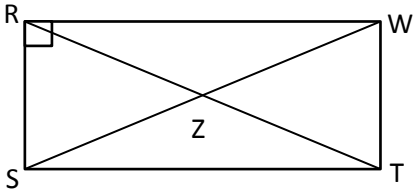


State whether the following conjectures are true or false. If false, provide a counter example or change the statement to make it true.

1. If a quadrilateral is a parallelogram, then two pairs of opposite sides are congruent.
2. If a quadrilateral is a parallelogram, then the diagonals bisect each other.
3. If a quadrilateral is a parallelogram, then the diagonals are perpendicular.
4. If a quadrilateral is a rectangle, then at least one angle is a right angle.
5. If a quadrilateral is a square, then the diagonals are congruent.
6. If a quadrilateral is a rhombus, then the interior triangles are all isosceles.
7. If a parallelogram is a rhombus, then the opposite sides are parallel.
8. If a quadrilateral is a parallelogram, then the diagonals bisect the opposite angles.
9. If a quadrilateral is a square, then consecutive angles are supplementary.
10. If a quadrilateral is a rectangle, then the diagonals bisect the opposite angles.

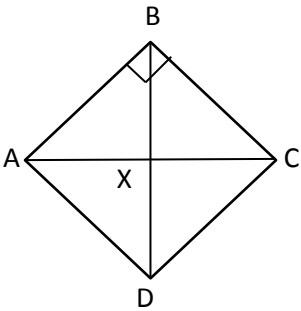
11. Find the value(s) of the variable(s) for parallelogram RSTW.



$$RZ = 2x + 5$$

$$SW = 5x - 20$$

12. Find the value(s) of the variable(s) for parallelogram ABCD.



$$AX = 2x + 4$$

$$XC = 3y + 5$$

$$BD = 2x + 5y + 5$$

13. Find $m\angle DAC$ & \overline{BC} for parallelogram ABCD.

$$\angle CAD = (11x - 3)^\circ$$

$$\angle ACB = (9y - 2)^\circ$$

$$AD = -5x + 12y - 8$$

$$BC = 3x + 4y$$

