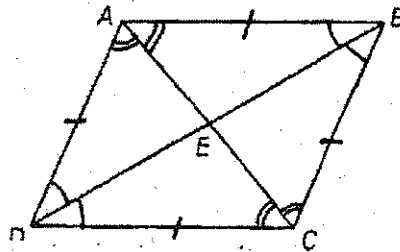Name: _____ Date: _____

Decide whether the statement is *sometimes*, *always*, or *never* true.

1. A rhombus is equilateral.

2. The diagonals of a rectangle are perpendicular.

3. The opposite angles of a rhombus are supplementary.

4. A square is a rectangle.

5. The diagonals of a rectangle bisect each other.

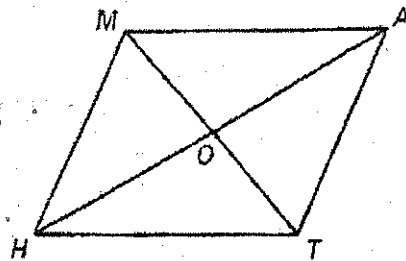6. The consecutive angles of a square are supplementary.

Quadrilateral *ABCD* is a rhombus.

7. If $m\angle BAE = 32°$, find $m\angle ECD$.

8. If $m\angle EDC = 43°$, find $m\angle CBA$.

9. If $m\angle EAB = 57°$, find $m\angle ADC$.

10. If $m\angle BEC = 3x - 15°$, solve for x.

11. If $m\angle ADE = 5x - 8°$ and $m\angle CBE = 3x + 24$, solve for x.

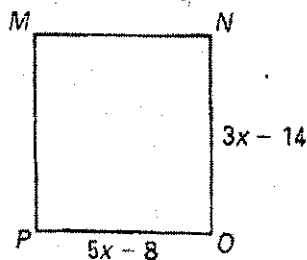12. If $m\angle BAD = 4x + 14°$ and $m\angle ABC = 2x + 10°$, solve for x.

MATH is a parallelogram with diagonals intersecting at O. Identify the type depending upon the given conditions.

13. $\overline{MT} \perp \overline{AH}$

14. $\overline{MT} \cong \overline{AH}$

15. $\overline{MA} \perp \overline{AT}, \overline{AM} \cong \overline{MH}$

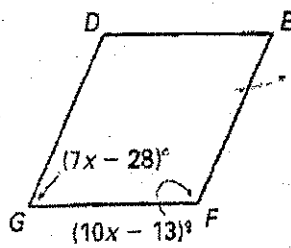16. $\overline{MO} \cong \overline{OT}, \overline{AO} \cong \overline{OH}$

Find the value of x.

17. *MNOP* is a square.

$3x - 14$

$5x - 8$

18. *DEFG* is a rhombus.

$(7x - 28)°$

$(10x - 13)°$

19. *WXYZ* is a rectangle.

$7x + 4$

$3(x + 8)$