

Name _____

Date _____

Geometry, Period _____

Special Parallelograms I

True or False

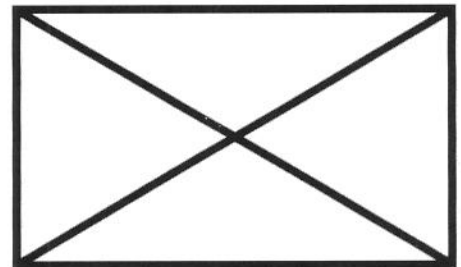
- _____ 1. Some rectangles are squares.
- _____ 2. All rhombi are squares.
- _____ 3. No rectangles are rhombi.
- _____ 4. A parallelogram with a right angle must be a square.
- _____ 5. If the diagonals of a parallelogram bisect each other, then it must be a rhombus.
- _____ 6. All parallelograms with four congruent sides have four congruent angles.

Fill in the blanks.

- _____ 7. If the diagonals of a parallelogram are congruent, then it must be a ? .
- _____ 8. If the diagonals of a parallelogram are perpendicular, then it must be a ? .
- _____ 9. If the diagonals of a parallelogram bisect the angles of the parallelogram, then it must be a ? .
- _____ 10. If the diagonals of a parallelogram are perpendicular and congruent, then it must be a ? .
- _____ 11. If a parallelogram has four congruent sides, then it must be a ? .

WXYZ is a rectangle.

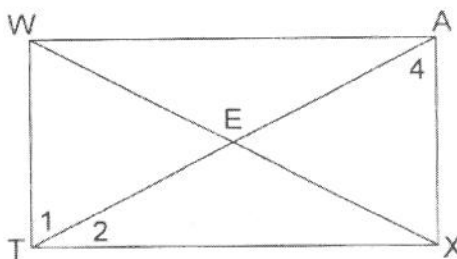
12. If $WY = 17$, then $ZX =$ _____ .
13. If $WY = 31$, then $WT =$ _____
14. If $WY = 3a + 16$ and $ZX = 5a - 18$, then $a =$ _____
15. If $m\angle TWZ = 70$, then $m\angle TZW =$ _____ and $m\angle WTZ =$ _____



Special Parallelogram II

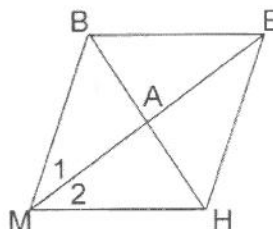
WAXT is a rectangle. $WT = 8$ and $TX = 12$

- _____ 1. Is $\angle 1 \cong \angle 4$?
- _____ 2. Is $TA = WX$?
- _____ 3. Is $WX \perp TA$?
- _____ 4. Is $\angle 1 \cong \angle 2$?
- _____ 5. $WX = \underline{\hspace{1cm}}$



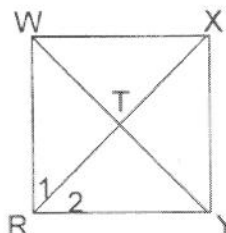
BEHM is a rhombus

- _____ 6. If $MB = 12$, then $BE = \underline{\hspace{1cm}}$
- _____ 7. Is $\triangle EAH \cong \triangle MAH$?
- _____ 8. $m\angle BAE = \underline{\hspace{1cm}}$
- _____ 9. Is $\angle 1 \cong \angle 2$?



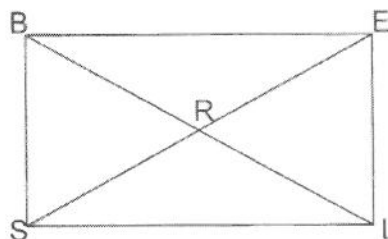
WXYR is a square

- _____ 10. Is $\overline{WY} \perp \overline{RX}$?
- _____ 11. Is $WY = RX$?
- _____ 12. Is $\angle 1 \cong \angle 2$?



BELS is a rectangle. $BE = 2x + 4y$, $SL = 10$, $BS = 5x + 3y$, $EL = 18$

- _____ 13. $x = \underline{\hspace{1cm}}$
 $y = \underline{\hspace{1cm}}$
- _____ 14. $SR = \underline{\hspace{1cm}}$
- _____ 15. $BL = \underline{\hspace{1cm}}$
- _____ 16. Is $\angle RSL \cong \angle RLS$?



DECM is a rhombus. $m\angle ECD = 65^\circ$

- _____ 17. $m\angle CBM = \underline{\hspace{1cm}}$
- _____ 18. $m\angle CMB = \underline{\hspace{1cm}}$
- _____ 19. $m\angle CDE = \underline{\hspace{1cm}}$

