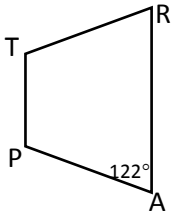
Geometry Name:_____
Unit 2 Quadrilaterals Unit Test Review Period:_____

1. Determine the sum of the interior angles of a 15 sided polygon.

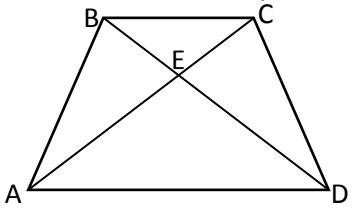
2. If each exterior angle of a polygon measures 15°, how many sides does the regular polygon have?

3. The expression $2x + 5$ represents the interior angle of an octagon. Determine the value of x.

4. Look at the isosceles trapezoid below. Determine the m ∠ T.



5. Look at the isosceles trapezoid below.

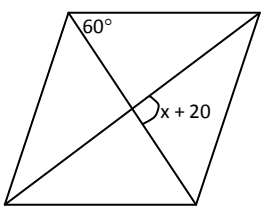


   a. If the m ∠ BAD = 4x – 8, and m ∠ CDA = 3x +10. Solve for x and m ∠ BAD

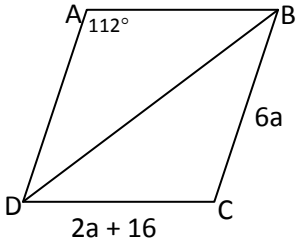
   b. If AB = 4y – 2, BC = 2y + 4, CD = 6y – 10. Solve for y, AB and BC.

   c. If BD = 8z – 8, and AC = 3z + 2. Solve for z, BD and AC.

6. Look at the parallelogram below. Determine a value for x that makes the parallelogram a rhombus.



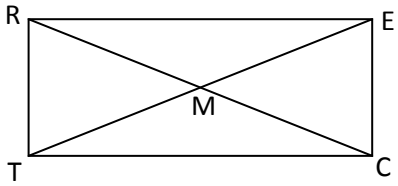
7. Look at the rhombus below.



a. Determine the measure of AD

b. Determine the m $\angle$ ABD

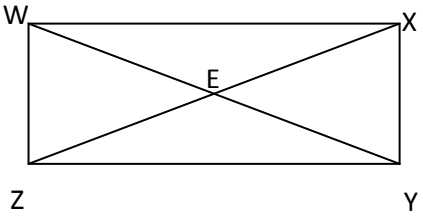
8. In rectangle RECT, RE = 12 feet, and ET = 22 feet



a. Determine the length of EC

b. Determine the length of EM

9. Write a proof for the information below



Given: WXYZ is a rectangle

Prove: $\angle EZY \cong \angle EYZ$

10. Use the diagonals to determine whether a parallelogram with the given vertices is a rectangle, rhombus, or a square. Give all the names that apply. **SHOW ALL YOUR WORK!**
    A(-3, 0) B(-1, -3) C(2, -1) D(0, 2)