**LEARNING ACTIVITY SHEET IN MATH 9**

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Learner: | John Russel Jandonero | Score: |  |
| Grade and Section: | GRADE 9 TAE | Week & Date: | **Week 4 – April 15, 2021** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the Topic:** | **Midline Theorem, Kites and Trapezoids** | | |
| **Most Essential Learning Competency:** | | **Code:** | **M9GE-IIId-1 M9GE-IIId-2**  **M9GE-IIIe-1** |
| * Proves the Midline Theorem. * Proves theorems on trapezoids and kites. * Solves problems involving parallelograms, trapezoids and kites. | | | |
| **I. Concept Notes:** *(Will be in a separate file.)* | | | |
| **II. Learning Activities:** | | | |
| Learning Activity 1: (15 points)  **1A. Directions:** Find the missing length indicated.   1. Find AC 2. Find IK 3. Find PQ   **1B. Directions:** Answer the following questions using the given figure, when is the midline of the trapezoid LIST.     1. Solve for q if p=13 and r=25.      1. Solve for p if r=64 and q=44.      1. Solve for r if p=15 and q=26.      1. If trapezoid LIST is isosceles and m, find the measures of all other angles in the figure.      1. If trapezoid LIST is isosceles, m and m, solve for x and find the measures of all other angles in the figure.     **1C. Directions:** Solve for j, k, l, m, and n in the kite BIRD shown here.    Given: m  DR = cm  DS = cm  DB = 6 cm | | | |
| Learning Activity 2:  Directions: Solve each problem completely and accurately. Show your solution and  write the theorems or properties you applied to justify each step in the solution process. You may  illustrate each given, to serve as your guide. Be sure to box your final answer.   1. Given: Quadrilateral WISH is a parallelogram. 2. If m ∠W = x + 15 and m ∠S = 2x + 5, what is m ∠W? 3. If WI = 3y + 3 and HS = y + 13, how long is HS? 4. WISH is a rectangle and its perimeter is 56 cm. One side is 5 cm less than twice the   other side. What are its dimensions and how large is its area?   1. What is the perimeter and the area of the largest square that can be formed from rectangle WISH in 1.c.? 2. Given: Quadrilateral POST is an isosceles trapezoid with OS || PT. ER is its median. 3. If OS = 3x – 2, PT = 2x + 10 and ER = 14, how long is each base? 4. If m ∠P = 2x + 5 and m ∠O = 3x – 10, what is m ∠T? 5. One base is twice the other and ER is 6 cm long. If its perimeter is 27 cm, how long is each leg? 6. ER is 8.5 in long and one leg measures 9 in. What is its perimeter if one of the bases is 3 in more than the other? 7. Given: Quadrilateral LIKE is a kite with LI ≅ IK and LE ≅ KE. 8. LE is twice LI. If its perimeter is 21 cm, how long is LE? 9. What is its area if one of the diagonals is 4 more than the other and IE + LK = 16 in? 10. IE = (x – 1) ft. and LK = (x + 2) ft. If its area is 44 how long are IE and LK? | | | |
| **III. Reflection:** | | | |
| I am having a hard time stating the proof, but solving the missing variables is kind of fun, overall the lesson was fun. | | | |

Prepared by: **ALEXANDRA M. ACOSTA / Math Teacher I**