**LEARNING ACTIVITY SHEET IN MATH 9**

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| Name of Learner: | Francisco B. Jubelag Jr. XX | Score: |  |
| Grade and Section: | 9 - TAE | Week & Date: | **Week 6 – April 29, 2021** |

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| **Title of the Topic:** | **Similarity Triangles** | | |
| **Most Essential Learning Competency:** | | **Code:** | **M9GE-IIIg-1 M9GE-IIIg-h-1** |
| * Illustrate similarity of figures. * Proves the conditions for similarity of triangles such as the SAS, SSS, AA similarity theorem. | | | |
| **I. Concept Notes:** *(Will be in a separate file.)* | | | |
| **II. Learning Activities:** | | | |
| **Learning Activity 1:**  **1A. Directions:** Explain why the triangles are similar and write a similarity statement.      🛆ACB ~ 🛆EDF  **Reason:**    🛆ABC > ∠C + ∠D + ∠A = 180 °  🛆ABC > 58 ° + 80 ° + ∠A = 180 °  180 = (53 + 80) = 180 – 133 = 47 -> ∠A  🛆EDF > 53 ° + ∠F + 47 ° = 180 °  180 – (53 + 47) = 180 – 100 = 80 -> ∠F  ∠C = ∠D, ∠B =∠F, ∠E = ∠A  53 80 47  **AAA Similarity Theorem**      🛆ACB ~ 🛆IHG  **Reason:**  ∠C = ∠H = 90  AC ~ IH, CB ~ HG  **Scale Factor:**      **Statement of Proportionality:**    **SAS Similarity Theorem**      **🛆**AKJ ~ 🛆ABC  **Reason:**  CB ~ JK , AK ~ AB , ∠B = ∠K X = AB    2(20 + x) = 60  40 + 2x = 60  2x = 20    20 + x = 20 + 10 = 30 -> AB  **Scale factor:**      **Statement of Proportionality:**    SAS Similarity Theorem      No Similar Triangles  **Reason:**  Lacking Information  **2B. Directions:** Determine if the given statement is true or false.   1. All squares are similar. True 2. All rectangles are similar. False 3. All right triangles are similar. False 4. Congruent polygons are similar. True 5. Two similar polygons are congruent. False | | | |
| **Learning Activity 2:**  **Directions**: Find the value of x. **With solution** | | | |
| **Learning Activity 3:  Directions:** Prove the Triangle Midline Theorem using triangle similarity postulates and theorems.  Given:  Prove:   |  |  | | --- | --- | | Statements | Reasons | |  | Given | |  | Reflexive property | |  | If of one | |  | AA – if | | | | |
| **III. Reflection:** | | | |
| What I have learned about this week’s LAS is about how to prove and explain why the triangles are similar with the cooperation of using similarity statements. It was hard, to be honest, I had to ask people and search google what to do in some situations to truly understand, but I still managed to attain that understanding. | | | |

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