Republic of the Philippines
DEPARTMENT OF EDUCATION
National Capital Region
Schools Division Office, Quezon City
Sauyo High School

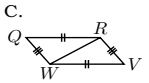
Name: _____ Date: _____
Section: _____ Score: _____

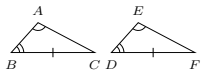
Third Summative Test in Mathematics 8 (Part B)
S.Y. 2022–2023

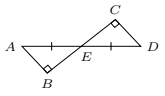
Multiple Choice: *Choose the letter that corresponds to the correct answer. Write the answer in your answer sheet.*

1. Which triangle congruence postulate states that if the two sides and an included angle of one triangle are congruent to the corresponding two sides and included angle of another triangle, then the two triangles are congruent?
   A. ASA postulate B. SAS postulate C. SSS postulate D. AAS postulate
2. "If two angles and the included side of one triangle are congruent to the corresponding two angles and included side of another triangle, then the two triangles are congruent." This is stated in:
   A. ASA postulate B. SAS postulate C. SSS postulate D. AAS postulate
3. If two triangles are congruent by the SAS triangle congruence postulate, then which corresponding parts must be congruent?
   A. All sides C. Two sides and the included angle
   B. Two angles and the included side D. All angles
4. Which corresponding parts must be congruent if two triangles are congruent by the ASA postulate?
   A. All sides C. Two sides and the included angle
   B. Two angles and the included side D. All angles
5. Which theorem states that if the legs of one right triangle are congruent to the legs of another right triangle, then the triangles are congruent?
   A. HA Congruence Theorem C. LA Congruence Theorem
   B. HL Congruence Theorem D. LL Congruence Theorem
6. "If two angles and a non-included side of one triangle are congruent to the corresponding two angles and a non-induded side of another triangle, then the triangles are congruent." This is stated in:
   A. AAS Congruence Theorem C. HL Congruence Theorem
   B. LL Congruence Theorem D. LA Congruence Theorem
7. Which of the following pairs of triangles are congruent and can be proved by HL Theorem?

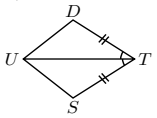
   A. 

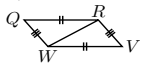
   C. 

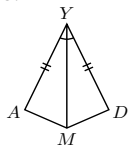
   B. 

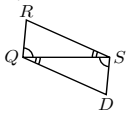
   D. 

8. Which of the following pairs of triangles are congruent and can be proved by ASA Postulate?

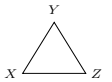
   A. 

   B. 

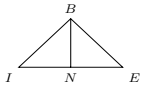
   C. 

   D. 

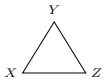
9. A triangle which has all three interior angles congruent is called:
   A. Equiangular B. Equilateral C. Isosceles D. Right
10. "If two angles of a triangle are congruent, then the sides opposite those angles are also congruent." This is stated in:
    A. Isosceles Triangle Theorem C. AAS Triangle Congruence Theorem
    B. Converse of Isosceles Triangle Theorem D. LL Triangle Congruence Theorem
11. A triangle in which all three sides have the same length is called:
    A. Equiangular B. Equilateral C. Isosceles D. Right
12. The congruent sides of an isosceles triangle are called:
    A. Base B. Base angles C. Legs D. Vertex angle
13. Which theorem states that if two sides of a triangle are congruent, then the angles opposite those sides are congruent?
    A. Isosceles Triangle Theorem C. AAS Triangle Congruence Theorem
    B. Converse of Isosceles Triangle Theorem D. LL Triangle Congruence Theorem
14. The angles opposite the congruent sides of an isosceles triangle are called:
    A. Base B. Base angles C. Legs D. Vertex angle
15. A triangle is isosceles if two of its sides are:
    A. Congruent B. Intersecting C. Parallel D. Perpendicular
16. Let $\triangle XYZ$ be an equiangular triangle. What theorem or postulate can justify that $\triangle XYZ$ is also equilateral?

    A. Isosceles Triangle Theorem C. AAS Triangle Congruence Theorem
    B. Converse of Isosceles Triangle Theorem D. LL Triangle Congruence Theorem
17. In $\triangle EBI$, let N be the midpoint of $\overline{IE}$ and $\overline{BN} \perp \overline{IE}$. What theorem or postulate can justify that $\triangle BNI \cong \triangle BNE$?

    A. AAS B. ASA C. LL D. HL
18. $\triangle ABC$ and $\triangle DEF$ are isosceles right triangles. If $\overline{AB} \cong \overline{DE}$ and $\overline{AC} \cong \overline{DF}$, which of the following statements is true by CPCTC?
    A. $\overline{AC} \cong \overline{EF}$ B. $\overline{BC} \cong \overline{EF}$ C. $\overline{CA} \cong \overline{EF}$ D. $\overline{CB} \cong \overline{FD}$
19. Let $\triangle XYZ$ be an equilateral triangle. What theorem or postulate can justify that $\triangle XYZ$ is also equiangular?

    A. Isosceles Triangle Theorem C. AAS Triangle Congruence Theorem
    B. Converse of Isosceles Triangle Theorem D. LL Triangle Congruence Theorem
20. Which triangle congruence postulate states that if the three sides of one triangle are congruent to the corresponding sides of another triangle, then the two triangles are congruent?
    A. ASA Congruence Postulate C. SSS Congruence Postulate
    B. SAS Congruence Postulate D. AAS Congruence Postulate
21. Which property of congruence states that any triangle is congruent to itself?
    A. Additive Property B. Reflexive Property C. Symmetric Property D. Transitive Property
22. The side common to two angles of a triangle is called:
    A. Congruent side B. Corresponding side C. Included side D. Paired side
23. The angle between two sides of a triangle is called:
    A. Congruent $\angle$ B. Corresponding $\angle$ C. Included $\angle$ D. Paired $\angle$
24. "If $\triangle ABC \cong \triangle XYZ$, then $\triangle XYZ \cong \triangle ABC$." This is stated in:
    A. Additive Property B. Reflexive Property C. Symmetric Property D. Transitive Property
25. Which of the following is NOT a property of congruence?
    A. Additive Property B. Reflexive Property C. Symmetric Property D. Transitive Property