Math 8 Q3 ASSIGNMENT 4: TRIANGLE CONGRUENCE

PART I: WRITE THE CAPITAL LETTER OF YOUR ANSWER ON THE BOX PROVIDED.

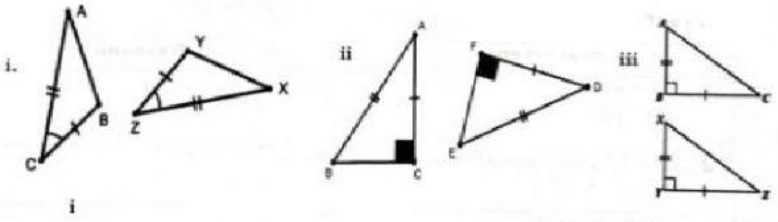
1. Which of the theorems below states that: "If two angles and a non-included side of one triangle are congruent to the corresponding two angles and a non-included side of another triangle, then the triangles are congruent."?

   A. HyA Congruence Theorem
   B. HyL Congruence Theorem
   C. LL Congruence Theorem
   D. AAS Congruence Theorem

2. Which of the following theorems states that: "If the hypotenuse and an acute angle of one right triangle are congruent to the corresponding hypotenuse and an acute angle of another right triangle, then the triangles are congruent."?

   A. HyA Congruence Theorem
   B. HyL Congruence Theorem
   C. LA Congruence Theorem
   D. LL Congruence Theorem

3. Which of the following pairs of triangles below are congruent and can be proved by SAS Congruence?



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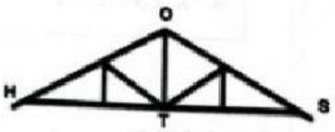
   A. i and ii
   B. ii and iii
   C. iii
   D. i, ii, and iii

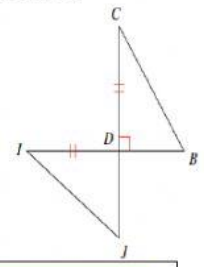
4. In the figure at the right, $\overline{OT}$ is a perpendicular bisector of $\overline{HS}$ at T. What triangle congruence theorem can be used to prove that $\Delta HOT \cong \Delta SOT$?



   A. LL Congruence Theorem
   B. HyA Congruence Theorem
   C. HyL Congruence Theorem
   D. AAS Congruence Theorem

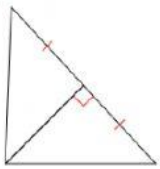
PART II. WHICH RIGHT ANGLE CONGRUENCE THEOREM (HA, HL, LA, LL) IS USED TO PROVE THAT EACH PAIR OF TRIANGLES ARE CONGRUENT? TYPE YOUR ANSWER ALL IN CAPITAL LETTERS ONLY ON THE BOX PROVIDED. THE FIRST ONE IS DONE AS AN EXAMPLE

EXAMPLE:

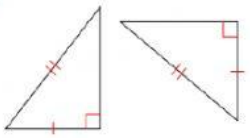


ANSWER: LA

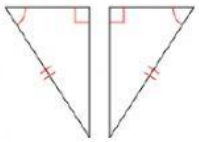
1)



2)



3)



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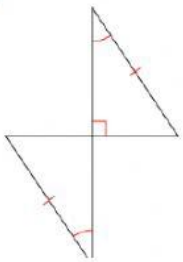

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