

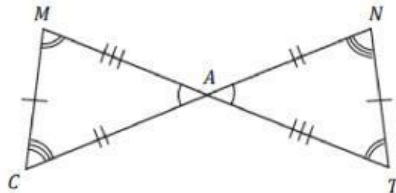


## LONG TEST IN MATH 8

**Directions:** Read and understand each item carefully. Write the Capital letter and answer of your best choice.

- What do you call the statements that are assumed to be TRUE and do not need proof?  
A. Postulate      B. defined terms      C. theorems      D. undefined terms
- Which undefined term has a specific position but has no dimension or direction?  
A. Point      B. Line      C. Plane      D. angle
- Which of the following represents a plane?  
A. Tip of a pen      B. stretched rope      C. top of the table      D. corner of a rectangular box
- What do you call the lines that intersect at a point forming a right angle?  
A. Diagonals      B. line segments      C. parallel lines      D. perpendicular line
- What figure is formed when two noncollinear rays meet in a common point?  
A. Square      B. triangle      C. plane      D. angle
- What axiom is illustrated in the statement, If  $A = B$ ,  $B = C$ , then  $A = C$ ?  
A. Multiplication      B. reflexive      C. transitive      D. symmetric
- Which statement justifies congruent angles?  
A. If two lines intersect      C. if it has the same measure  
B. If it has a common side      D. if the sum of two angles is  $180^\circ$
- Which of the following is a symbol used for congruence?  
A.  $=$       B.  $\neq$       C.  $\approx$       D.  $\cong$
- How many pairs of corresponding congruent angles are there in two congruent triangles?  
A. 1      B. 2      C. 3      D. 4
- Which of the symbols below is used to indicate correspondence?  
A.  $\cong$       B.  $\Delta$       C.  $\angle$       D.  $\leftrightarrow$
- Which of the following statements best describes the corresponding parts of congruent triangles?  
A. They are not equal.      C. They are supplementary.  
B. They are congruent.      D. They are complementary.

For items 20 - 23, consider the figure below.



- Which segment corresponds to  $\overline{NT}$ ?  
A.  $\overline{AT}$       B.  $\overline{CM}$       C.  $\overline{AC}$       D.  $\overline{AM}$
- Which angle corresponds to  $\angle T$ ?  
A.  $\angle A$       B.  $\angle M$       C.  $\angle C$       D.  $\angle N$
- Which vertex corresponds to A?  
A. A      B. N      C. M      D. T
- What conclusion can you make in the figure?  
A.  $\triangle ANT \cong \triangle MAC$   
B.  $\triangle ANT \cong \triangle CAM$   
C.  $\triangle AMC \cong \triangle ATN$   
D.  $\triangle AMC \cong \triangle TAN$
- Given that  $\triangle HIJ \cong \triangle LMN$ , what angle corresponds to  $\angle J$ ?  
A.  $\angle H$       B.  $\angle M$       C.  $\angle$       D.  $\angle N$
- If  $\triangle SIN \cong \triangle COS$ , which of the following is NOT true?  
A.  $\angle I \cong \angle O$       B.  $\overline{IN} \cong \overline{OC}$       C.  $\angle S \cong \angle C$       D.  $\overline{NI} \cong \overline{SO}$
- If  $\triangle LUV \cong \triangle YAH$ , then  $\triangle HAY$  is congruent to \_\_\_\_\_.  
A.  $\triangle AYH$       B.  $\triangle UVL$       C.  $\triangle LVU$       D.  $\triangle VUL$

19. If  $\angle E \leftrightarrow \angle N$ ,  $\angle V \leftrightarrow \angle S$  and  $\angle R \leftrightarrow \angle M$ , then  $\triangle EVR \cong$  \_\_\_\_.

A.  $\triangle NSM$

B.  $\triangle NSR$

C.  $\triangle MNS$

D.  $\triangle SRV$

20. Given  $\triangle MAD$ , what is the included side between  $\angle M$  and  $\angle D$ ?

A.  $\overline{MA}$

B.  $\overline{AD}$

C.  $\overline{MD}$

D.  $\overline{AM}$

21. Given  $\triangle RED$ , what is the included side between  $\angle E$  and  $\angle D$ ?

A.  $\overline{ED}$

B.  $\overline{RD}$

C.  $\overline{RE}$

D.  $\overline{DR}$

22. Which of the illustrations below represents the ASA Congruence Postulate?

A.



B.



C.



D.



23. Which of the illustrations below represents the SAS Congruence Postulate?

A.



B.



C.

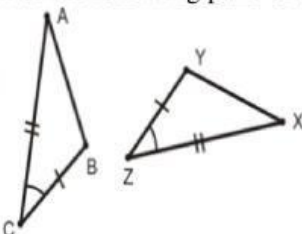


D.

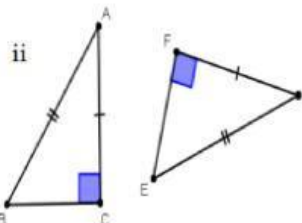


24. Which of the following pairs of triangles below are congruent and can be proved by SAS Congruence?

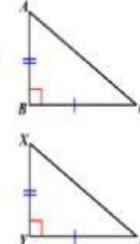
i.



ii.



iii.



A. i and ii

C. iii

B. i and iii

D. i, ii, and iii

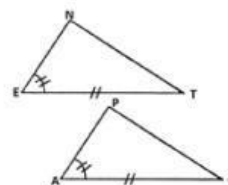
25. In the figures at the right,  $\angle E \cong \angle A$ ,  $ET \cong AY$ . What additional data is needed to prove that  $\triangle NET \cong \triangle PAY$  by SAS Congruence?

A.  $\angle N \cong \angle P$

C.  $NE \cong PA$

B.  $\angle T \cong \angle Y$

D.  $NT \cong PY$



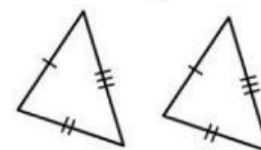
26. If the two triangles are congruent, what reason can be given?

A. SAS Postulate

C. ASA Postulate

B. SSS Postulate

D. AAS Theorem



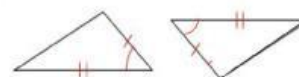
27. If the two triangles are congruent, what reason can be given?

A. SAS Postulate

C. ASA Postulate

B. SSS Postulate

D. SAA Theorem



28. Given that  $\triangle VAN \cong \triangle BUS$ ,  $\angle V = 60^\circ$  and  $\angle N = 70^\circ$ , find  $\angle U$ .

A.  $50^\circ$

B.  $60^\circ$

C.  $70^\circ$

D.  $80^\circ$

29. If  $\triangle BUN \cong \triangle DLE$ ,  $\overline{BN}$  is 3.15 cm,  $\overline{BU}$  is 5.90 cm find the length of  $\overline{DE}$ .

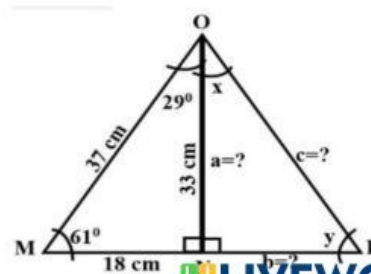
A. 2.75 cm

B. 3.15 cm

C. 5.90 cm

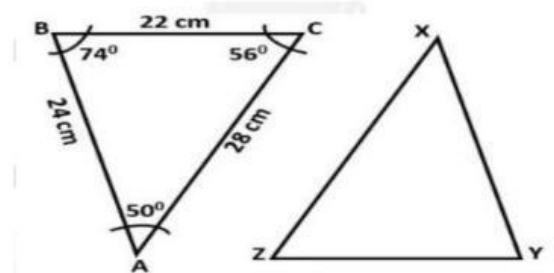
D. 9.05 cm

Given  $\triangle MON \cong \triangle PON$ , solve for the values of a, b, c, x, and y.



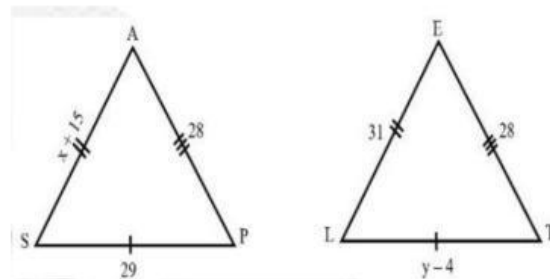
30. What is the value of a?  
A. 33 cm                      B. 18 cm                      C. 37 cm                      D. 42 cm
31. What is the value of b?  
A. 33 cm                      B. 18 cm                      C. 37 cm                      D. 42 cm
32. What is the value of c?  
A. 33 cm                      B. 18 cm                      C. 37 cm                      D. 42 cm
33. What is the value of x?  
A.  $90^\circ$                       B.  $61^\circ$                       C.  $29^\circ$                       D.  $180^\circ$
34. What is the value of y?  
A.  $90^\circ$                       B.  $61^\circ$                       C.  $29^\circ$                       D.  $180^\circ$

Given  $\triangle ABC \cong \triangle XYZ$ , solve for the angles and sides of  $\triangle XYZ$



35. Find the measure of  $\overline{XY}$ .  
A. 28 cm                      B. 24 cm                      C. 22 cm                      D. 21 cm
36. Find the measure of  $\overline{YZ}$ .  
A. 28 cm                      B. 24 cm                      C. 22 cm                      D. 21 cm
37. Find the measure of  $\angle Y$ .  
A.  $50^\circ$                       B.  $74^\circ$                       C.  $56^\circ$                       D.  $180^\circ$
38. Find the measure of  $\angle Z$ .  
A.  $50^\circ$                       B.  $74^\circ$                       C.  $56^\circ$                       D.  $180^\circ$

Given:  $\triangle SAP \cong \triangle LET$ , solve for the value of x and y



39. What is the value of x?  
A. 6                      B. 16                      C. 12                      D. 24
40. What is the value of y?  
A. 22                      B. 33                      C. 11                      D. 35

"God did not say it will be easy, but He did say it will be worth it."  
#NeverGiveUp  
#jmosp#