## **Quiz 3.3: Triangle Congruence**

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

1.	0 0	uence postulate states t sides of another triangl		f one triangle are congruent es are congruent?		
	A. ASA Congruence P	ostulate	C. SSS Congruence Postulate			
	B. SAS Congruence Postulate		D. AAS Congruence Postulate			
2.	1 1 0	rty of congruence states that any triangle is congruent to itself? roperty B. Reflexive Property C. Symmetric PropertyD. Transitive Property				
0	3. The angle between two sides of a triangle is called:					
٥.	G	S		D. Doimad /		
	A. Congruent ∠	B. Corresponding ∠	C. included Z	D. Paired ∠		
4.	The side common to two angles of a triangle is called:					
	A. Congruent side	B. Corresponding side	e C. Included side	D. Paired side		
5.	How do we determine if two triangles are congruent?					
	A. Corresponding sides must be congruent.					
B. Corresponding angles must be congruent.						
	C. Corresponding sides and angles must be congruent.					
D. Included sides and angles must be congruent.						
6.	"If $\triangle ABC \cong \triangle XYZ$ , then "If $\triangle ABC \cong \triangle XYZ$ ", then "If $\triangle ABC \cong ABC$ ", then "I	hen $\triangle XYZ \cong \triangle ABC$ ."	Γhis is stated in:			
	A. Additive Property	B. Reflexive Property	C. Symmetric Propert	yD. Transitive Property		
7.	Which of the following is NOT a property of congruence?					
	A. Additive Property	B. Reflexive Property	C. Symmetric Propert	yD. Transitive Property		
8.	Which property of congruence states that if a triangle is congruent to another triangle, are the second triangle is congruent to another triangle, then the first triangle is congruent to the third triangle?					
	A. Additive Property	D. Doffersine Duese entre	C Common aturi a Duran aut	yD Transitive Property		
	1 3	B. Reliexive Property	C. Symmetric Propert	yD. Transitive Froperty		
9.		B. Reliexive Property $\overline{C}$ correspond if $\triangle ABC$	•	yD. Hansiuve Froperty		
9.		- •	•	D. $\overline{IH}$		
	To which side does $\overline{B}$ A. $\overline{HI}$	$\overline{C}$ correspond if $\triangle ABC$	$\cong \triangle HIJ$ ?  C. $\overline{HJ}$			
	To which side does $\overline{B}$ A. $\overline{HI}$	$\overline{C}$ correspond if $\triangle ABC$ B. $\overline{IJ}$	$\cong \triangle HIJ$ ?  C. $\overline{HJ}$ if $\triangle DAR \cong \triangle WIN$ ?			
10.	To which side does $\overline{B}$ A. $\overline{HI}$ Which of the following A. $\triangle DRA \cong \triangle WNI$	$\overline{C}$ correspond if $\triangle ABC$ B. $\overline{IJ}$ g statements is FALSE	$\cong \triangle HIJ?$ C. $\overline{HJ}$ if $\triangle DAR \cong \triangle WIN?$ C. $\triangle ADR \cong \triangle IWN$	D. $\overline{IH}$		
10.	To which side does $\overline{B}$ A. $\overline{HI}$ Which of the following A. $\triangle DRA \cong \triangle WNI$	$\overline{C}$ correspond if $\triangle ABC$ B. $\overline{IJ}$ g statements is FALSE and B. $\triangle RAD \cong \triangle NIW$	$\cong \triangle HIJ?$ C. $\overline{HJ}$ if $\triangle DAR \cong \triangle WIN?$ C. $\triangle ADR \cong \triangle IWN$	D. $\overline{IH}$		
10. 11.	To which side does $\overline{B}$ A. $\overline{HI}$ Which of the following A. $\triangle DRA \cong \triangle WNI$ What is the included A. $\angle E$	$\overline{C}$ correspond if $\triangle ABC$ B. $\overline{IJ}$ g statements is FALSE B. $\triangle RAD \cong \triangle NIW$ angle between $\overline{EF}$ and	$\cong \triangle HIJ?$ C. $\overline{HJ}$ if $\triangle DAR \cong \triangle WIN?$ C. $\triangle ADR \cong \triangle IWN$ $\overline{FG} \text{ in } \triangle EFG?$ C. $\angle G$	D. $\overline{IH}$ D. $\triangle ARD \cong \triangle NWI$		
10. 11.	To which side does $\overline{B}$ A. $\overline{HI}$ Which of the following A. $\triangle DRA \cong \triangle WNI$ What is the included A. $\angle E$	$\overline{C}$ correspond if $\triangle ABC$ B. $\overline{IJ}$ g statements is FALSE B. $\triangle RAD \cong \triangle NIW$ angle between $\overline{EF}$ and B. $\angle F$	$\cong \triangle HIJ?$ C. $\overline{HJ}$ if $\triangle DAR \cong \triangle WIN?$ C. $\triangle ADR \cong \triangle IWN$ $\overline{FG} \text{ in } \triangle EFG?$ C. $\angle G$	D. $\overline{IH}$ D. $\triangle ARD \cong \triangle NWI$		
<ul><li>10.</li><li>11.</li><li>12.</li></ul>	To which side does $\overline{B}$ A. $\overline{HI}$ Which of the following A. $\triangle DRA \cong \triangle WNI$ What is the included A. $\angle E$ Given $\triangle ABC$ , determ A. $\overline{AB}$	$\overline{C}$ correspond if $\triangle ABC$ B. $\overline{IJ}$ g statements is FALSE B. $\triangle RAD \cong \triangle NIW$ angle between $\overline{EF}$ and B. $\angle F$ ine the included side between $\overline{AC}$	$\cong \triangle HIJ$ ?  C. $\overline{HJ}$ if $\triangle DAR \cong \triangle WIN$ ?  C. $\triangle ADR \cong \triangle IWN$ $\overline{FG}$ in $\triangle EFG$ ?  C. $\angle G$ etween $\angle B$ and $\angle C$ .  C. $\overline{BC}$	D. $\overline{IH}$ D. $\triangle ARD \cong \triangle NWI$ D. $\angle GEF$		

## **Answer Key**

			-			
1.	. 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?					
	Solution:					
	A. ASA Congruence Postulate B. SAS Congruence Postulate		C. SSS Congruence Postulate			
			D. AAS Congruence Postulate			
2. Which property of congruence states that any triangle is congruent to itself? <b>Solution:</b>						
		B Reflevive Property	C Symmetric Propert	yD. Transitive Property		
0				y D. Translave Troperty		
3.	The angle between two sides of a triangle is called:  Solution:					
	A. Congruent $\angle$	B. Corresponding $\angle$	C. Included $\angle$	D. Paired $\angle$		
4.						
	Solution:					
	A. Congruent side	B. Corresponding side	e C. Included side	D. Paired side		
5.	<ul><li>5. How do we determine if two triangles are congruent?</li><li>Solution:</li><li>A. Corresponding sides must be congruent.</li></ul>					
B. Corresponding angles must be congruent.						
<ul><li>C. Corresponding sides and angles must be congruent.</li><li>D. Included sides and angles must be congruent.</li></ul>						
					6.	6. "If $\triangle ABC \cong \triangle XYZ$ , then $\triangle XYZ \cong \triangle ABC$ ." This is stated in:
Solution:						
	A. Additive Property	B. Reflexive Property	C. Symmetric Propert	yD. Transitive Property		
7.	7. Which of the following is NOT a property of congruence?					
	Solution:					
	A. Additive Property	B. Reflexive Property	C. Symmetric Propert	yD. Transitive Property		
8.	Which property of congruence states that if a triangle is congruent to another triangle, are the second triangle is congruent to another triangle, then the first triangle is congruent to the third triangle?  Solution:					
	A. Additive Property	B. Reflexive Property	C. Symmetric Propert	yD. Transitive Property		
9. To which side does $\overline{BC}$ correspond if $\triangle ABC \cong \triangle HIJ$ ?						
	Solution:					
	A. $\overline{HI}$	B. <i>IJ</i>	C. $\overline{HJ}$	D. $\overline{IH}$		
10. Which of the following statements is FALSE if $\triangle DAR \cong \triangle WIN$ ?						
	Solution:					
	<b>A.</b> $\triangle DRA \cong \triangle WNI$	B. $\triangle RAD \cong \triangle NIW$	C. $\triangle ADR \cong \triangle IWN$	<b>D.</b> $\triangle ARD \cong \triangle NWI$		
11.	What is the included a	angle between $\overline{EF}$ and	$\overline{FG}$ in $\triangle EFG$ ?			
	Solution:					

**C**. ∠*G* 

B. ∠*F* 

**A.** ∠*E* 

D. ∠GEF

12. Given  $\triangle ABC$ , determine the included side between  $\angle B$  and  $\angle C$ .

Solution:

A.  $\overline{AB}$ 

B.  $\overline{AC}$ 

C.  $\overline{BC}$ 

D.  $\overline{BA}$ 

13. Which parts must be congruent if  $\triangle XVW\cong\triangle VXK$  using the SSS congruence postulate? **Solution:** 

- A.  $\overline{WV} \cong \overline{KX}$
- B.  $\overline{XV} \cong \overline{VX}$
- C.  $\overline{VW} \cong \overline{XK}$
- D.  $\overline{WX} \cong \overline{KV}$