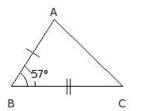
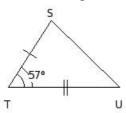
Name: Congruence of Triangles

Chapter : Triangles
Grade : SSC Grade IX

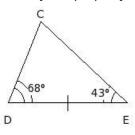
License: Non Commercial Use

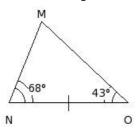
1. Identify the property by which the two given triangles are congruent



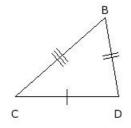


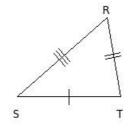
- (i) RHS Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) ASA Congruency
- 2. Identify the property by which the two given triangles are congruent



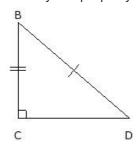


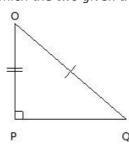
- (i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency
- 3. Identify the property by which the two given triangles are congruent





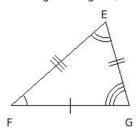
- (i) SSS Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) ASA Congruency
- 4. Identify the property by which the two given triangles are congruent

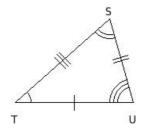




(i) SAS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SSS Congruency



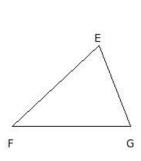


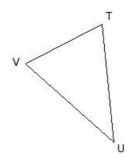


(i) $\triangle \mathsf{EFG} \cong \triangle \mathsf{TUS}$ (ii) $\triangle \mathsf{FGE} \cong \triangle \mathsf{STU}$ (iii) $\triangle \mathsf{EFG} \cong \triangle \mathsf{UTS}$ (iv) $\triangle \mathsf{EFG} \cong \triangle \mathsf{UST}$ (v) $\triangle \mathsf{EFG} \cong \triangle \mathsf{STU}$

6. In the given figure, $\triangle EFG \cong \triangle VUT$. Which of the following are true?

- a) $\angle F = \angle U$
- b) $\angle E = \angle T$
- c) FG = VU
- d) $\angle G = \angle T$
- e) FG = UT

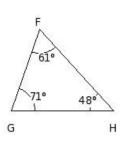


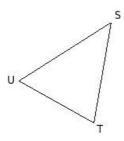


(i) $\{b,c,e\}$ (ii) $\{b,a,d\}$ (iii) $\{b,a\}$ (iv) $\{c,d\}$ (v) $\{a,d,e\}$

7. In the given figure, $\triangle FGH \cong \triangle UTS$. Which of the following are true?

- a) $\angle T = 71^{\circ}$
- b) $\angle S = 48^{\circ}$
- c) $\angle S = 61^{\circ}$
- d) ∠T = 48°
- e) $\angle U = 71^{\circ}$
- f) $\angle U = 61^{\circ}$





(i) $\{d,b\}$ (ii) $\{c,a\}$ (iii) $\{a,b,f\}$ (iv) $\{e,c,f\}$ (v) $\{d,a,b\}$



a)
$$TR = 12 cm$$

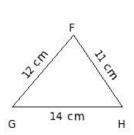
b)
$$RS = 12 cm$$

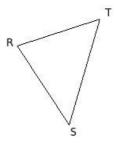
c)
$$TR = 11 cm$$

d)
$$RS = 14 cm$$

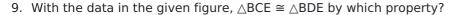
e)
$$ST = 12 cm$$

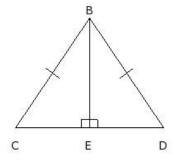
f)
$$ST = 14 \text{ cm}$$





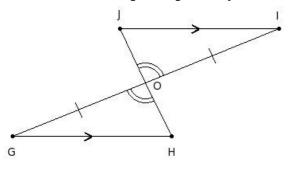
(i) $\{a,b\}$ (ii) $\{e,a,f\}$ (iii) $\{b,c,f\}$ (iv) $\{d,b,c\}$ (v) $\{d,c\}$





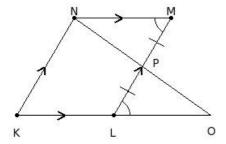
(i) SAS Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) ASA Congruency (v) not congruent





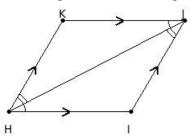
(i) SSS Congruency (ii) not congruent (iii) RHS Congruency (iv) ASA Congruency (v) SAS Congruency

11. With the given data in the figure, $\triangle NMP \cong \triangle OLP$ by which property?



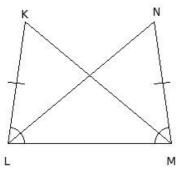
(i) SAS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) not congruent (v) RHS Congruency

12. With the given data in the figure, $\triangle HIJ \cong \triangle JKH$ by which property?



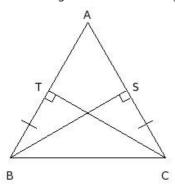
(i) SSS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) not congruent (v) RHS Congruency

13. With the given data in the figure, $\triangle KLM \cong \triangle NML$ by which property?



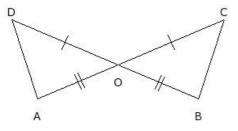
(i) SAS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) not congruent

14. With the given data in the figure, $\triangle TBC \cong \triangle SCB$ by which property?



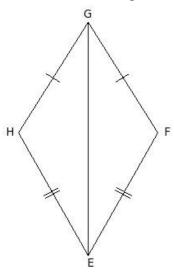
(i) SAS Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) not congruent

15. With the data in the given figure, $\triangle ADO \cong \triangle BCO$ by which property?

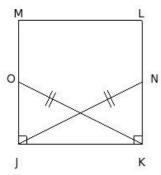


(i) not congruent (ii) RHS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

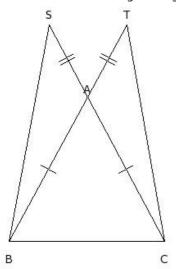
16. With the data in the given figure, $\triangle EHG \cong \triangle EFG$ by which property?



- (i) SSS Congruency (ii) not congruent (iii) RHS Congruency (iv) SAS Congruency (v) ASA Congruency
- 17. With the data in the given figure, $\triangle OJK \cong \triangle NKJ$ by which property?

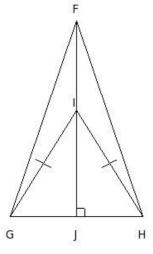


- (i) SSS Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) not congruent
- 18. With the data in the given figure, $\triangle SBC \cong \triangle TCB$ by which property?



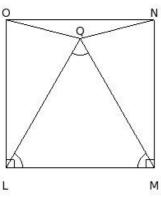
(i) SSS Congruency (ii) RHS Congruency (iii) not congruent (iv) ASA Congruency (v) SAS Congruency

19. In the given figure, $\triangle IGH$ is an isosceles triangle. FJ \perp GH passing through I. $\triangle FIG \cong \triangle FIH$ by which property?



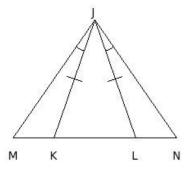
(i) SSS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) SAS Congruency (v) not congruent

20. In the given figure, LMNO is a square and $\triangle QLM$ is an equilateral triangle. $\triangle QOL \cong \triangle QNM$ by which property?



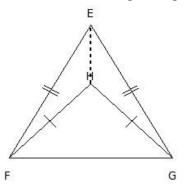
(i) RHS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) not congruent (v) SSS Congruency

21. With the data in the given figure, $\triangle JKM \cong \triangle JLN$ by which property?



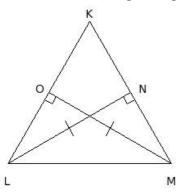
(i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) RHS Congruency (v) SSS Congruency

22. With the data in the given figure, $\triangle EHF \cong \triangle EHG$ by which property?

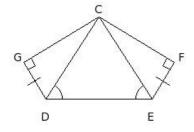


(i) ASA Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) not congruent (v) SAS Congruency

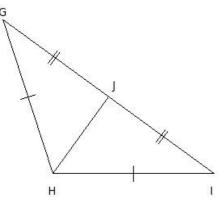
23. With the data in the given figure, $\triangle LNM \cong \triangle MOL$ by which property?



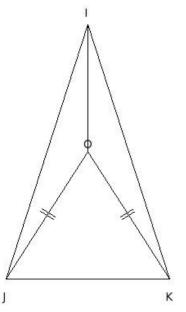
- (i) ASA Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) not congruent (v) SAS Congruency
- 24. With the data in the given figure, $\triangle CDG \cong \triangle CEF$ by which property?



- (i) not congruent (ii) SAS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency
- 25. In the given figure, $\triangle GHI$ is an obtuse angled triangle. $\triangle GHJ \cong \triangle IHJ$ by which property?

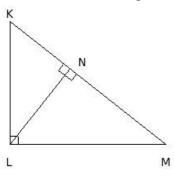


- (i) SSS Congruency (ii) not congruent (iii) RHS Congruency (iv) ASA Congruency (v) SAS Congruency
- 26. With the data in the given figure, $\triangle IOJ \cong \triangle IOK$ by which property?

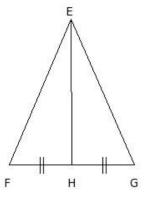


(i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) not congruent (v) SSS Congruency

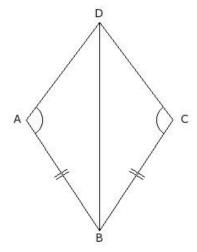
27. With the data in the figure, $\triangle KNL \cong \triangle MNL$ by which property?



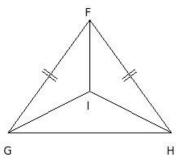
- (i) SAS Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) not congruent
- 28. With the data in the figure, $\triangle EHF \cong \triangle EHG$ by which property?



- (i) RHS Congruency (ii) not congruent (iii) ASA Congruency (iv) SAS Congruency (v) SSS Congruency
- 29. With the data in the figure, $\triangle ADB \cong \triangle CDB$ by which property?

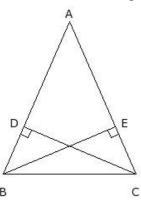


- (i) SAS Congruency (ii) not congruent (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency
- 30. With the data in the figure, $\triangle FGI \cong \triangle FHI$ by which property?

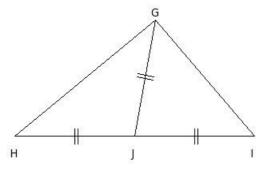


(i) RHS Congruency (ii) SSS Congruency (iii) not congruent (iv) ASA Congruency (v) SAS Congruency

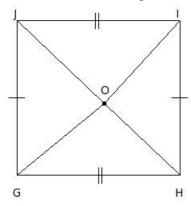
31. With the data in the figure, \triangle BEC \cong \triangle CDB by which property?



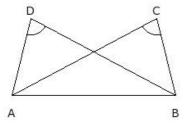
- (i) RHS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) not congruent
- 32. With the data in the figure, $\triangle GJH \cong \triangle GJI$ by which property?



- (i) SAS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) not congruent (v) SSS Congruency
- 33. With the data in the figure, $\triangle GOH \cong \triangle JOI$ by which property?

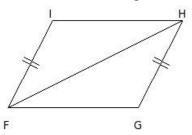


- (i) ASA Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) SAS Congruency (v) not congruent
- 34. With the data in the figure, $\triangle ABD \cong \triangle BAC$ by which property?



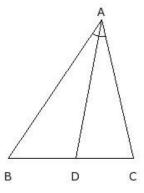
(i) RHS Congruency (ii) not congruent (iii) SAS Congruency (iv) ASA Congruency (v) SSS Congruency

35. With the data in the figure, $\triangle FHI \cong \triangle HFG$ by which property?



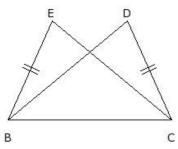
(i) ASA Congruency (ii) not congruent (iii) RHS Congruency (iv) SSS Congruency (v) SAS Congruency

36. With the data in the figure, $\triangle ADB \cong \triangle ADC$ by which property?



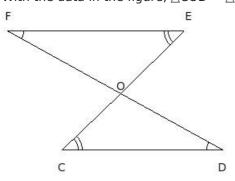
(i) SAS Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) ASA Congruency (v) not congruent

37. With the data in the figure, \triangle BEC \cong \triangle CDB by which property?



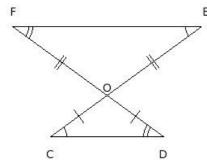
(i) RHS Congruency (ii) not congruent (iii) SAS Congruency (iv) ASA Congruency (v) SSS Congruency

38. With the data in the figure, $\triangle COD \cong \triangle EOF$ by which property?

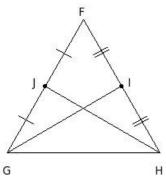


(i) SAS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) not congruent (v) SSS Congruency

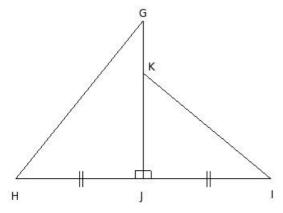




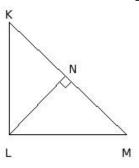
- (i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) RHS Congruency
- 40. With the data in the figure, $\triangle GHJ \cong \triangle HGI$ by which property?



- (i) SAS Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) not congruent (v) ASA Congruency
- 41. With the data in the figure, $\triangle GHJ \cong \triangle KIJ$ by which property?

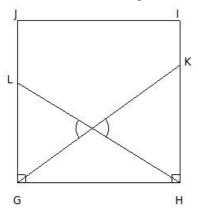


- (i) RHS Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) ASA Congruency
- 42. With the data in the figure, $\triangle KLN \cong \triangle MLN$ by which property?



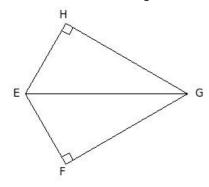
(i) RHS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) not congruent

43. With the data in the figure, $\triangle GHK \cong \triangle HGL$ by which property?



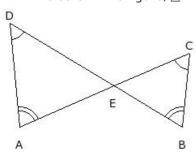
(i) SSS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) not congruent (v) RHS Congruency

44. With the data in the figure, $\triangle EGH \cong \triangle EGF$ by which property?



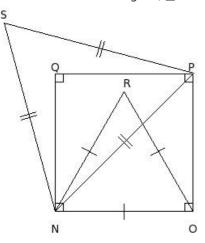
(i) SAS Congruency (ii) RHS Congruency (iii) not congruent (iv) SSS Congruency (v) ASA Congruency

45. With the data in the figure, $\triangle AED \cong \triangle BEC$ by which property?



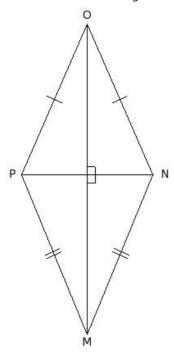
(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

46. With the data in the figure, $\triangle NOR \cong \triangle NPS$ by which property?

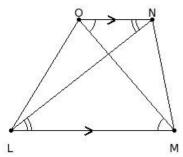


(i) ASA Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) RHS Congruency (v) not congruent

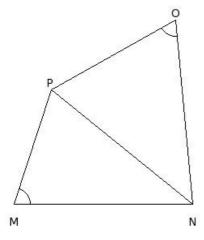
47. With the data in the given figure, $\triangle MNP \cong \triangle ONP$ by which property?



- (i) RHS Congruency (ii) SSS Congruency (iii) not congruent (iv) SAS Congruency (v) ASA Congruency
- 48. With the data in the given figure, $\triangle LMO \cong \triangle MLN$ by which property?

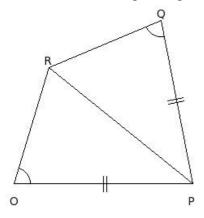


- (i) not congruent (ii) RHS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency
- 49. With the data in the given figure, $\triangle MNP \cong \triangle OPN$ by which property?



(i) RHS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) SAS Congruency (v) not congruent

50. With the data in the given figure, $\triangle OPR \cong \triangle QPR$ by which property?



(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

Assignment Key					
1) (ii)	2) (i)	3) (i)	4) (ii)	5) (v)	6) (v)
7) (iii)	8) (iii)	9) (iii)	10) (iv)	11) (iii)	12) (ii)
13) (i)	14) (ii)	15) (v)	16) (i)	17) (ii)	18) (v)
19) (iv)	20) (iii)	21) (i)	22) (ii)	23) (ii)	24) (v)
25) (i)	26) (iv)	27) (v)	28) (ii)	29) (ii)	30) (iii)
31) (v)	32) (iv)	33) (v)	34) (ii)	35) (ii)	36) (v)
37) (ii)	38) (iv)	39) (i)	40) (iv)	41) (iii)	42) (v)
43) (iv)	44) (iii)	45) (ii)	46) (v)	47) (iii)	48) (i)
49) (v)	50) (ii)				

Copyright © Small Systems Computing Pvt. Ltd.