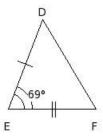
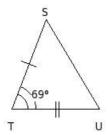
Name: Congruence of Triangles

Chapter : Triangles
Grade : SSC Grade IX

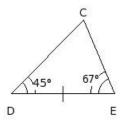
License: Non Commercial Use

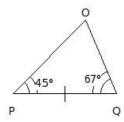
1. Identify the property by which the two given triangles are congruent



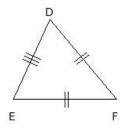


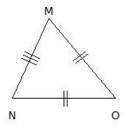
- (i) SAS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) RHS Congruency
- 2. Identify the property by which the two given triangles are congruent



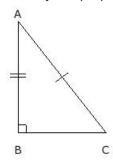


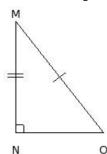
- (i) SAS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) SSS Congruency
- 3. Identify the property by which the two given triangles are congruent





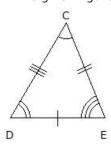
- (i) SAS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) RHS Congruency
- 4. Identify the property by which the two given triangles are congruent

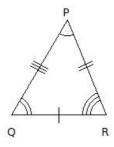




(i) RHS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) SSS Congruency

5. In the given figure, which of the following is true?





(i) $\triangle CDE \cong \triangle RQP$ (ii) $\triangle CDE \cong \triangle QRP$ (iii) $\triangle CDE \cong \triangle RPQ$ (iv) $\triangle CDE \cong \triangle PQR$ (v) $\triangle DEC \cong \triangle PQR$

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

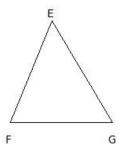
a)
$$\angle E = \angle P$$

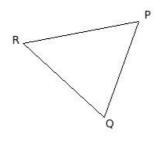
b)
$$\angle F = \angle Q$$

c)
$$FG = QP$$

d)
$$FG = RQ$$

e)
$$\angle G = \angle P$$





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

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

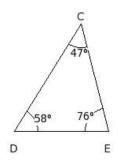
a)
$$\angle T = 76^{\circ}$$

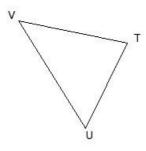
b)
$$\angle U = 76^{\circ}$$

c)
$$\angle V = 58^{\circ}$$

d)
$$\angle U = 58^{\circ}$$

f)
$$\angle T = 47^{\circ}$$





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



a)
$$US = 16 cm$$

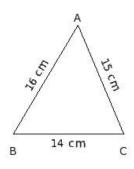
b)
$$TU = 16 cm$$

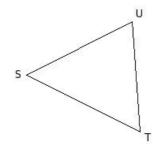
c)
$$TU = 14 \text{ cm}$$

d)
$$ST = 16 cm$$

e)
$$US = 15 cm$$

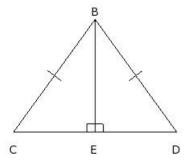
f)
$$ST = 14 \text{ cm}$$





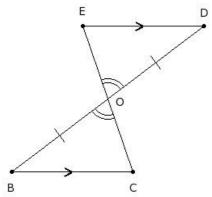
(i) $\{b,d\}$ (ii) $\{b,c,d\}$ (iii) $\{f,a,e\}$ (iv) $\{c,d,e\}$ (v) $\{a,c\}$

9. With the data in the given figure, \triangle BCE $\cong \triangle$ BDE by which property?



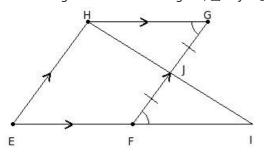
(i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

10. With the data in the given figure, $\triangle OED \cong \triangle OCB$ by which property?



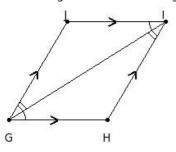
(i) not congruent (ii) SAS Congruency (iii) SSS Congruency (iv) RHS Congruency (v) ASA Congruency

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

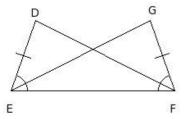


(i) RHS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) not congruent

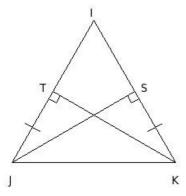
12. With the given data in the figure, $\triangle GHI \cong \triangle IJG$ by which property?



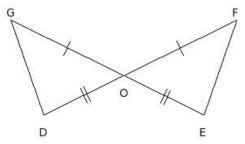
- (i) SSS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) not congruent (v) SAS Congruency
- 13. With the given data in the figure, $\triangle DEF \cong \triangle GFE$ by which property?



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

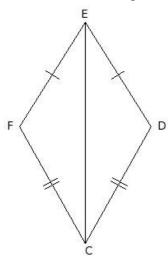


- (i) not congruent (ii) SAS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency
- 15. With the data in the given figure, $\triangle DGO \cong \triangle EFO$ by which property?

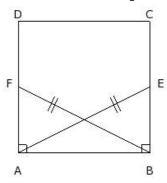


(i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) not congruent (v) SSS Congruency

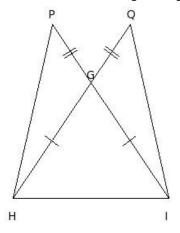
16. With the data in the given figure, $\triangle CFE \cong \triangle CDE$ by which property?



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

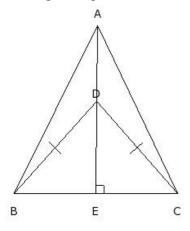


- (i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency
- 18. With the data in the given figure, $\triangle PHI \cong \triangle QIH$ by which property?



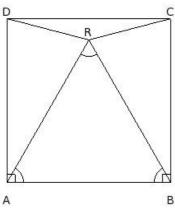
(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

19. In the given figure, $\triangle DBC$ is an isosceles triangle. AE \bot BC passing through D. $\triangle ADB \cong \triangle ADC$ by which property?



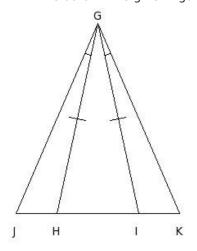
(i) SAS Congruency (ii) not congruent (iii) RHS Congruency (iv) ASA Congruency (v) SSS Congruency

20. In the given figure, ABCD is a square and \triangle RAB is an equilateral triangle. \triangle RDA \cong \triangle RCB by which property?



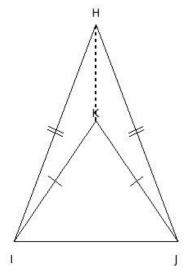
(i) ASA Congruency (ii) not congruent (iii) SSS Congruency (iv) RHS Congruency (v) SAS Congruency

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

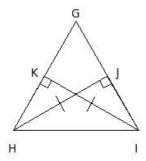


(i) RHS Congruency (ii) not congruent (iii) ASA Congruency (iv) SSS Congruency (v) SAS Congruency

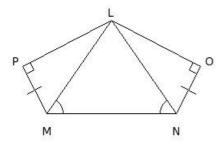
22. With the data in the given figure, $\triangle HKI \cong \triangle HKJ$ by which property?



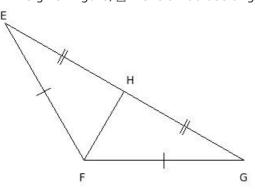
- (i) SAS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) SSS Congruency (v) not congruent
- 23. With the data in the given figure, $\triangle HJI \cong \triangle IKH$ by which property?



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

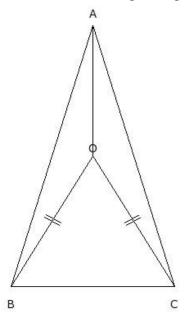


- (i) ASA Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) not congruent (v) SAS Congruency
- 25. In the given figure, $\triangle EFG$ is an obtuse angled triangle. $\triangle EFH \cong \triangle GFH$ by which property?

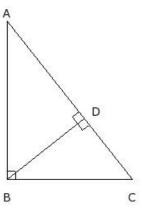


(i) ASA Congruency (ii) RHS Congruency (iii) not congruent (iv) SSS Congruency (v) SAS Congruency

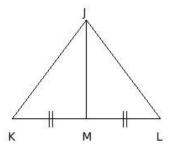
26. With the data in the given figure, $\triangle AOB \cong \triangle AOC$ by which property?



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

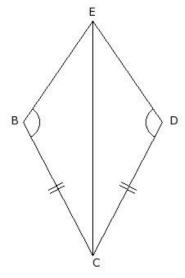


- (i) SAS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) not congruent (v) RHS Congruency
- 28. With the data in the figure, $\triangle JMK \cong \triangle JML$ by which property?



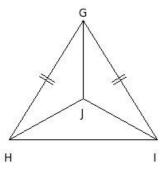
(i) SSS Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) not congruent





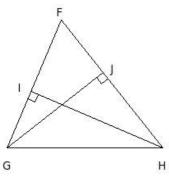
(i) ASA Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) RHS Congruency

30. With the data in the figure, $\triangle GHJ \cong \triangle GIJ$ by which property?



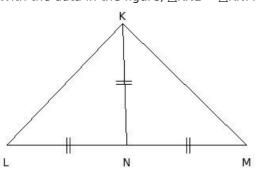
(i) SAS Congruency (ii) not congruent (iii) RHS Congruency (iv) SSS Congruency (v) ASA Congruency

31. With the data in the figure, $\triangle GJH \cong \triangle HIG$ by which property?



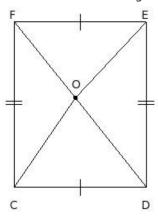
(i) SSS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) SAS Congruency (v) not congruent

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

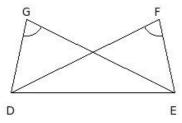


(i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) SAS Congruency

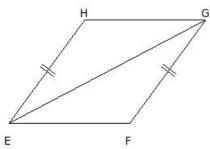
33. With the data in the figure, $\triangle COD \cong \triangle FOE$ by which property?



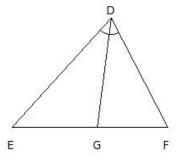
- (i) SSS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) not congruent (v) SAS Congruency
- 34. With the data in the figure, $\triangle DEG \cong \triangle EDF$ by which property?



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

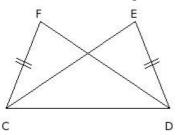


- (i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency (v) not congruent
- 36. With the data in the figure, $\triangle DGE \cong \triangle DGF$ by which property?

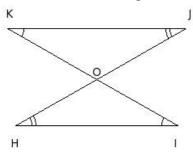


(i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) SSS Congruency (v) not congruent

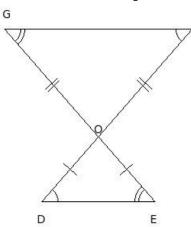
37. With the data in the figure, $\triangle CFD \cong \triangle DEC$ by which property?



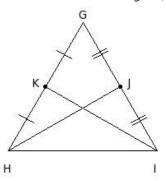
- (i) SSS Congruency (ii) ASA Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency
- 38. With the data in the figure, $\triangle HOI \cong \triangle JOK$ by which property?



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

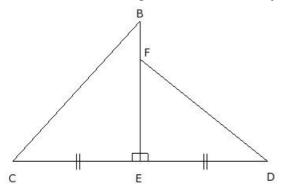


- (i) not congruent (ii) SSS Congruency (iii) SAS Congruency (iv) RHS Congruency (v) ASA Congruency
- 40. With the data in the figure, $\triangle HIK \cong \triangle IHJ$ by which property?

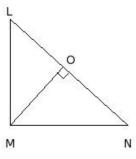


(i) not congruent (ii) RHS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) SAS Congruency

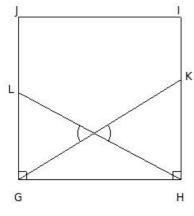
41. With the data in the figure, $\triangle BCE \cong \triangle FDE$ by which property?



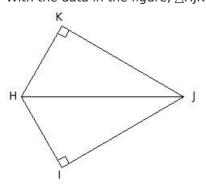
- (i) SSS Congruency (ii) SAS Congruency (iii) not congruent (iv) ASA Congruency (v) RHS Congruency
- 42. With the data in the figure, $\triangle LMO \cong \triangle NMO$ by which property?



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

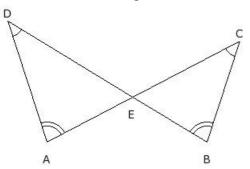


- (i) SSS Congruency (ii) ASA Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency
- 44. With the data in the figure, $\triangle HJK \cong \triangle HJI$ by which property?

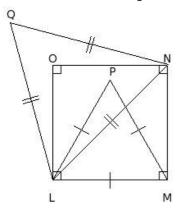


(i) ASA Congruency (ii) SSS Congruency (iii) not congruent (iv) RHS Congruency (v) SAS Congruency

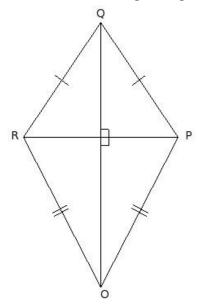
45. With the data in the figure, $\triangle AED \cong \triangle BEC$ by which property?



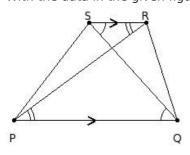
- (i) SAS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) not congruent
- 46. With the data in the figure, $\triangle LMP \cong \triangle LNQ$ by which property?



- (i) ASA Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) not congruent (v) SAS Congruency
- 47. With the data in the given figure, $\triangle \mathsf{OPR} \cong \triangle \mathsf{QPR}$ by which property?

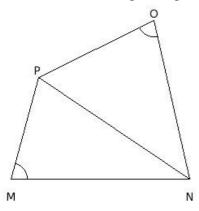


- (i) ASA Congruency (ii) not congruent (iii) SSS Congruency (iv) SAS Congruency (v) RHS Congruency
- 48. With the data in the given figure, $\triangle PQS \cong \triangle QPR$ by which property?

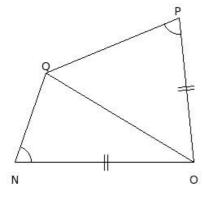


(i) SAS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) not congruent (v) RHS Congruency

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



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



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

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

Copyright © Small Systems Computing Pvt. Ltd.