EduSahara™ Assignment

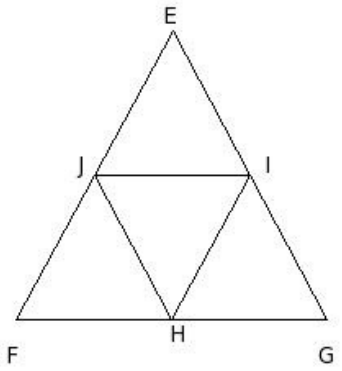
Name : Congruency of Triangles

Chapter : Triangles

Grade : ICSE Grade VIII

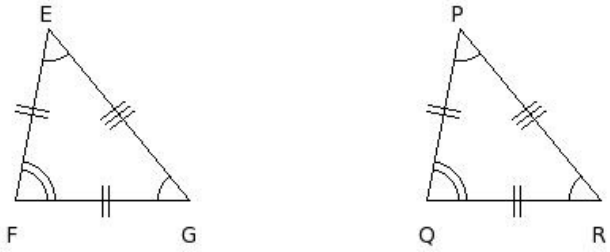
1. In the given figure, points H , I and J are the mid-points of sides FG, GE and EF of △EFG. Which of the following are true?

a) △EJI ≅ △HJI
b) △EJI ≅ △HIJ
c) △EJI ≅ △IHG
d) △JFH ≅ △HIJ
e) △JFH ≅ △EJI



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

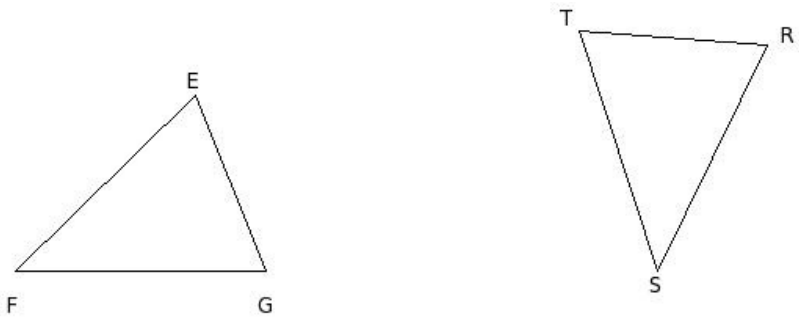
2. In the given figure, which of the following is true?



(i) △EFG ≅ △PQR (ii) △FGE ≅ △PQR (iii) △EFG ≅ △RQP (iv) △EFG ≅ △RPQ (v) △EFG ≅ △QRP

3. In the given figure, △EFG ≅ △TSR. Which of the following are true?

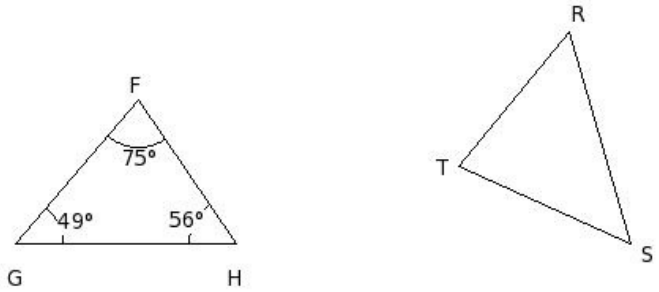
a) FG = TS
b) ∠F = ∠S
c) ∠G = ∠R
d) FG = SR
e) ∠E = ∠R



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

4. In the given figure, △FGH ≅ △TSR. Which of the following are true?

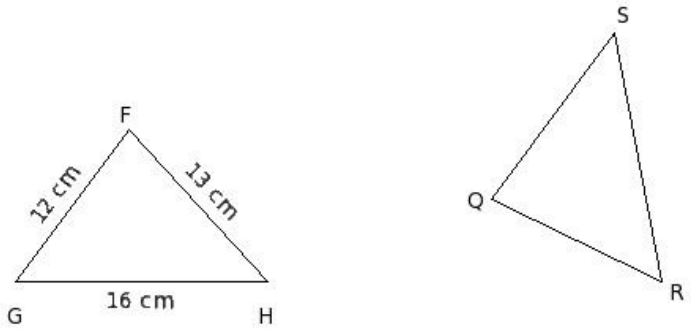
a) ∠T = 49°
b) ∠T = 75°
c) ∠R = 56°
d) ∠R = 75°
e) ∠S = 56°
f) ∠S = 49°



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

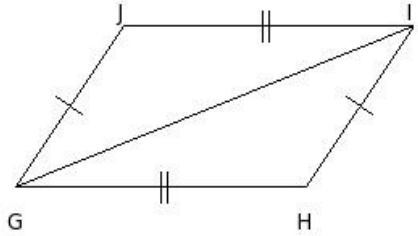
5. In the given figure, △FGH ≅ △QRS. Which of the following are true?

a) RS = 16 cm
b) SQ = 13 cm
c) SQ = 12 cm
d) QR = 12 cm
e) RS = 12 cm
f) QR = 16 cm



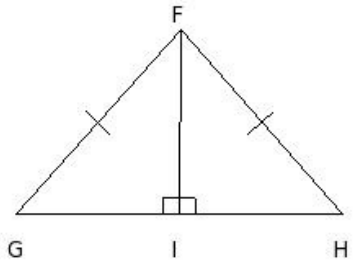
(i) {e,a,b} (ii) {c,a} (iii) {a,b,d} (iv) {e,b} (v) {f,c,d}

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



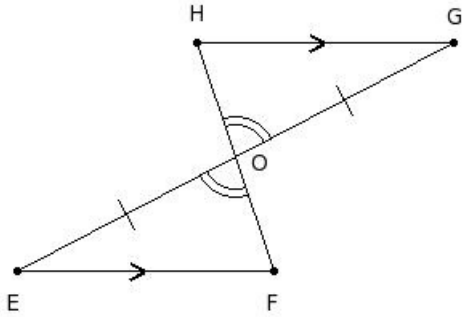
(i) △GIJ ≅ △GIH (ii) △GJI ≅ △GHI (iii) △GIJ ≅ △GHI (iv) △GJI ≅ △HIG (v) △GIJ ≅ △IGH

7. With the data in the given figure, △FGI ≅ △FHI by which property?



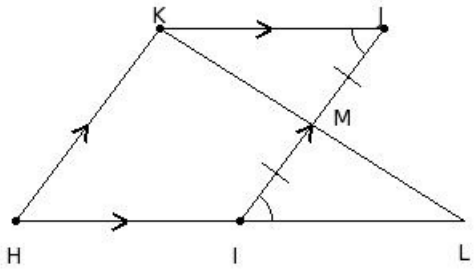
(i) RHS Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) not congruent

8. With the data in the given figure, △OHG ≅ △OFE by which property?



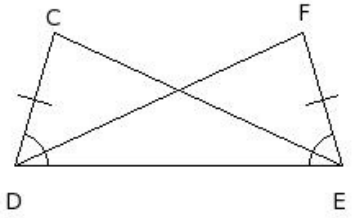
(i) SSS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) not congruent

9. With the given data in the figure, △KJM ≅ △LIM by which property?



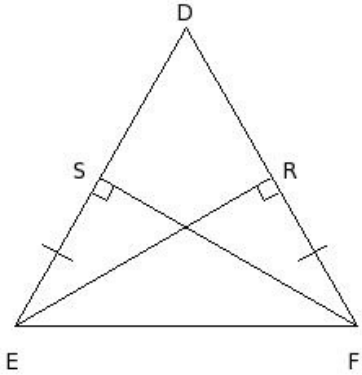
(i) ASA Congruency (ii) not congruent (iii) SAS Congruency (iv) RHS Congruency (v) SSS Congruency

10. With the given data in the figure, △CDE ≅ △FED by which property?



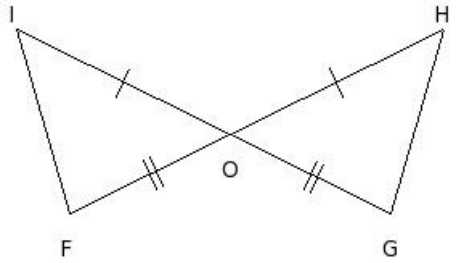
(i) SAS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) not congruent (v) RHS Congruency

11. With the given data in the figure, △SEF ≅ △RFE by which property?



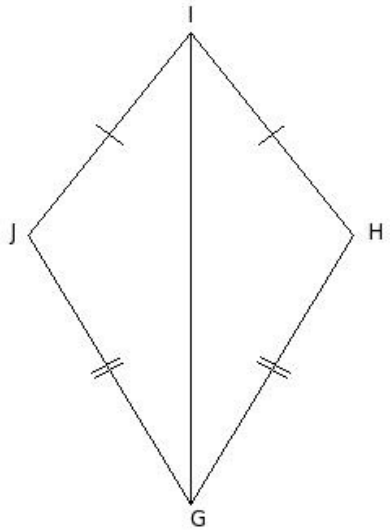
(i) not congruent (ii) SAS Congruency (iii) SSS Congruency (iv) RHS Congruency (v) ASA Congruency

12. With the data in the given figure, △FIO ≅ △GHO by which property?



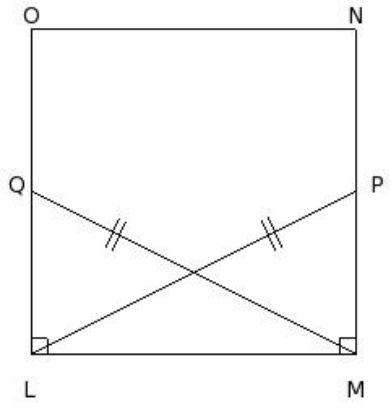
(i) SSS Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) ASA Congruency

13. With the data in the given figure, △GJI ≅ △GHI by which property?



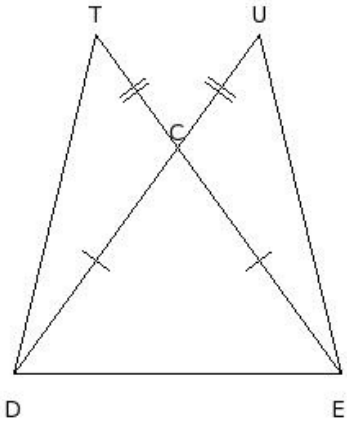
(i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) RHS Congruency (v) SSS Congruency

14. With the data in the given figure, △QLM ≅ △PML by which property?



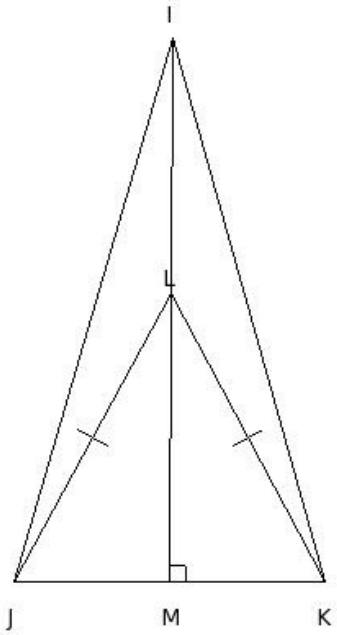
(i) SSS Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) ASA Congruency (v) not congruent

15. With the data in the given figure, △TDE ≅ △UED by which property?



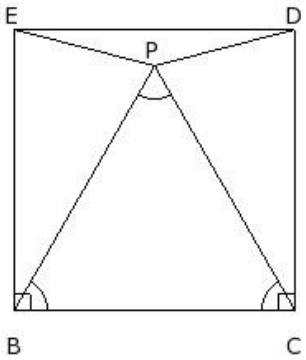
(i) SAS Congruency (ii) not congruent (iii) ASA Congruency (iv) RHS Congruency (v) SSS Congruency

16. In the given figure, △LJK is an isosceles triangle. IM ⊥ JK passing through L. △ILJ ≅ △ILK by which property?



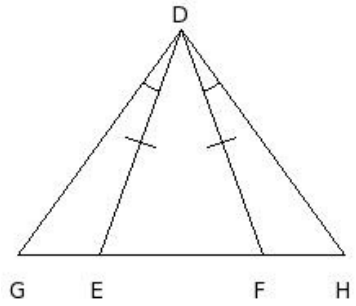
(i) ASA Congruency (ii) SSS Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency

17. In the given figure, BCDE is a square and △PBC is an equilateral triangle. △PEB ≅ △PDC by which property?



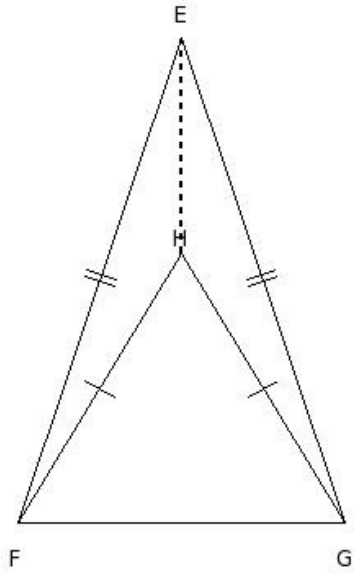
(i) SSS Congruency (ii) not congruent (iii) SAS Congruency (iv) RHS Congruency (v) ASA Congruency

18. With the data in the given figure, △DEG ≅ △DFH by which property?



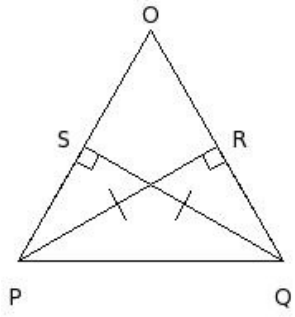
(i) SAS Congruency (ii) not congruent (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency

19. With the data in the given figure, △EHF ≅ △EHG by which property?



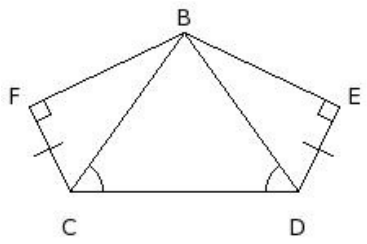
(i) RHS Congruency (ii) SAS Congruency (iii) not congruent (iv) ASA Congruency (v) SSS Congruency

20. With the data in the given figure, △PRQ ≅ △QSP by which property?



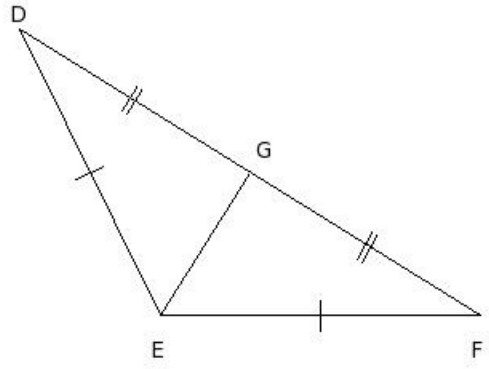
(i) SSS Congruency (ii) not congruent (iii) SAS Congruency (iv) ASA Congruency (v) RHS Congruency

21. With the data in the given figure, △BCF ≅ △BDE by which property?



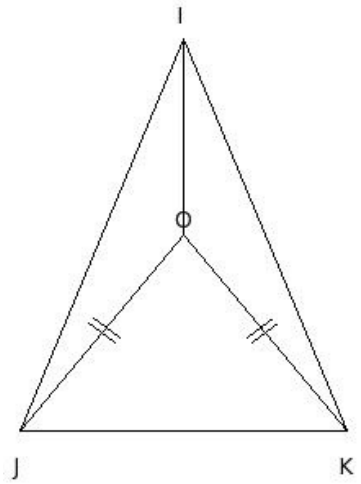
(i) SAS Congruency (ii) not congruent (iii) RHS Congruency (iv) SSS Congruency (v) ASA Congruency

22. In the given figure, △DEF is an obtuse angled triangle. △DEG ≅ △FEG by which property?



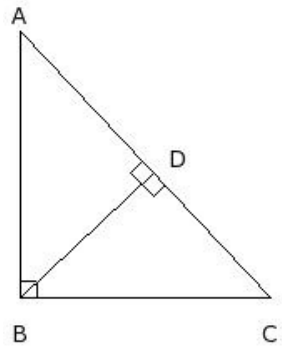
(i) SSS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) not congruent

23. With the data in the given figure, △IOJ ≅ △IOK by which property?



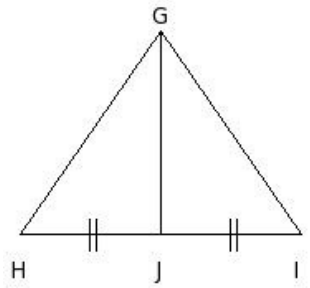
(i) SSS Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) not congruent (v) ASA Congruency

24. With the data in the figure, △ADB ≅ △CDB by which property?



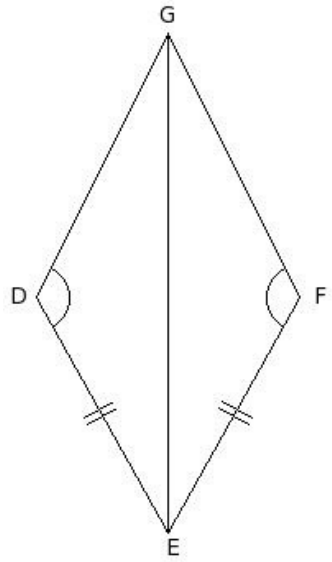
(i) not congruent (ii) ASA Congruency (iii) SAS Congruency (iv) RHS Congruency (v) SSS Congruency

25. With the data in the figure, △GJH ≅ △GJI by which property?



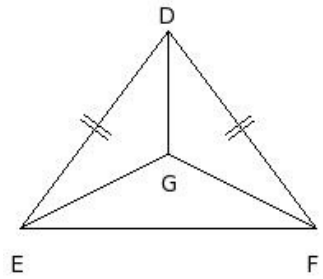
(i) SSS Congruency (ii) ASA Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency

26. With the data in the figure, △DGE ≅ △FGE by which property?



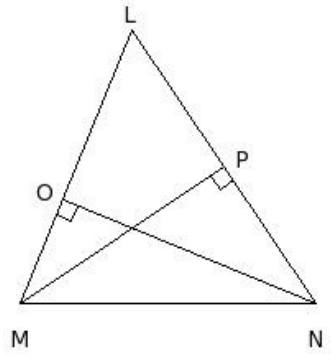
(i) RHS Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) not congruent

27. With the data in the figure, △DEG ≅ △DFG by which property?



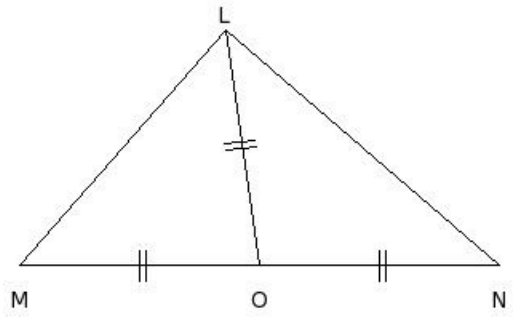
(i) SSS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) not congruent (v) RHS Congruency

28. With the data in the figure, △MPN ≅ △NOM by which property?



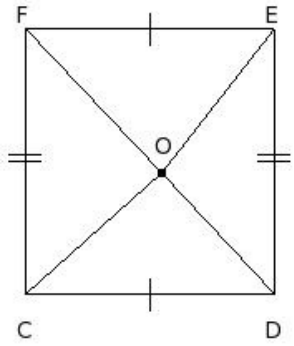
(i) SSS Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) ASA Congruency (v) not congruent

29. With the data in the figure, △LOM ≅ △LON by which property?



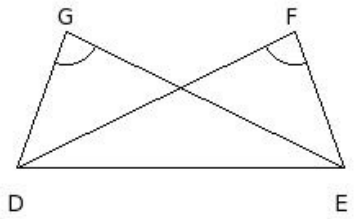
(i) SSS Congruency (ii) ASA Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency

30. With the data in the figure, △COD ≅ △FOE by which property?



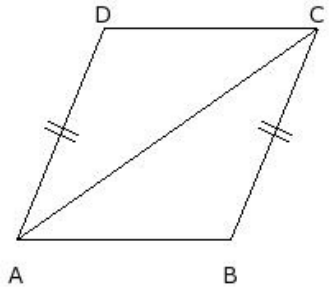
(i) SAS Congruency (ii) not congruent (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency

31. With the data in the figure, △DEG ≅ △EDF by which property?



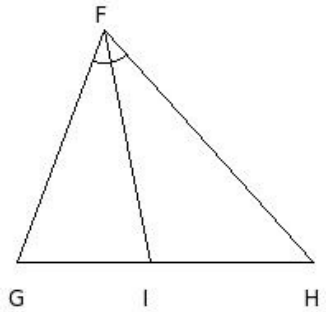
(i) SSS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) not congruent (v) RHS Congruency

32. With the data in the figure, △ACD ≅ △CAB by which property?



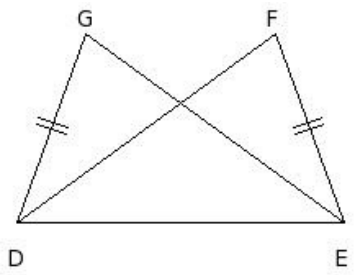
(i) RHS Congruency (ii) not congruent (iii) SAS Congruency (iv) SSS Congruency (v) ASA Congruency

33. With the data in the figure, △FIG ≅ △FIH by which property?



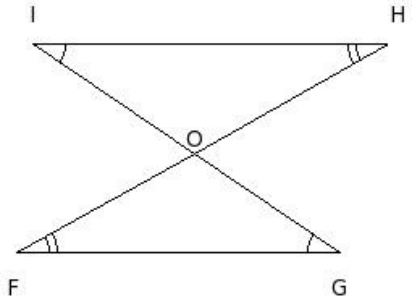
(i) RHS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) not congruent

34. With the data in the figure, △DGE ≅ △EFD by which property?



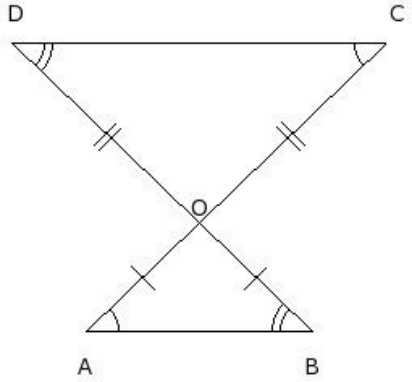
(i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) not congruent (v) SSS Congruency

35. With the data in the figure, △FOG ≅ △HOI by which property?



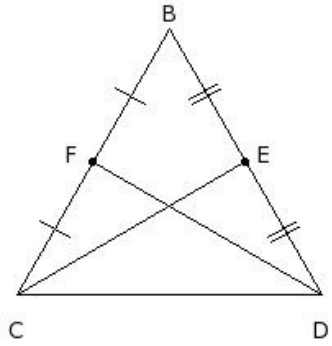
(i) not congruent (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency (v) ASA Congruency

36. With the data in the figure, △AOB ≅ △COD by which property?



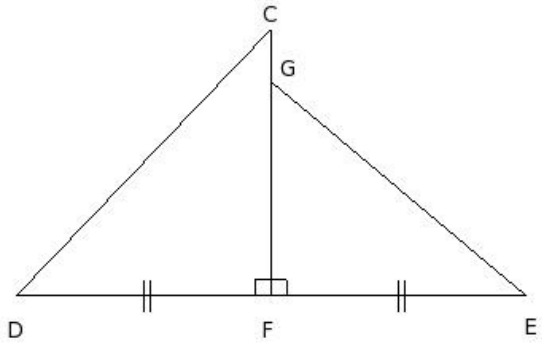
(i) RHS Congruency (ii) not congruent (iii) SAS Congruency (iv) SSS Congruency (v) ASA Congruency

37. With the data in the figure, △CDF ≅ △DCE by which property?



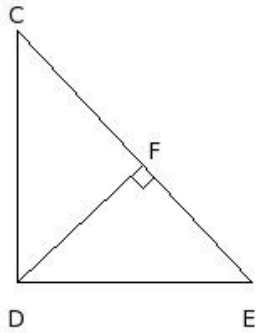
(i) not congruent (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency (v) ASA Congruency

38. With the data in the figure, △CDF ≅ △GEF by which property?



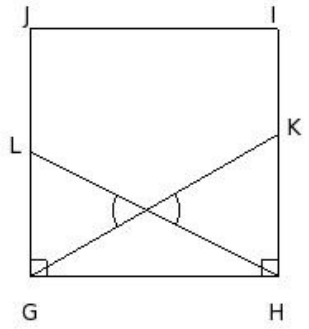
(i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) SSS Congruency (v) not congruent

39. With the data in the figure, △CDF ≅ △EDF by which property?



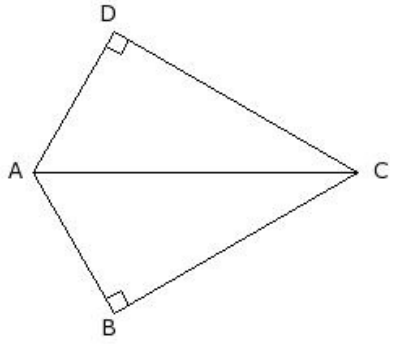
(i) ASA Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) SSS Congruency

40. With the data in the figure, △GHK ≅ △HGL by which property?



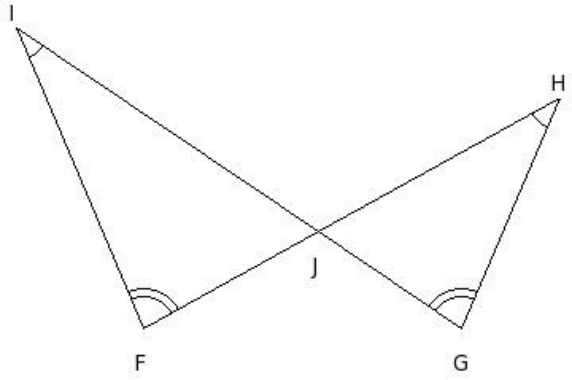
(i) RHS Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) ASA Congruency

41. With the data in the figure, △ACD ≅ △ACB by which property?



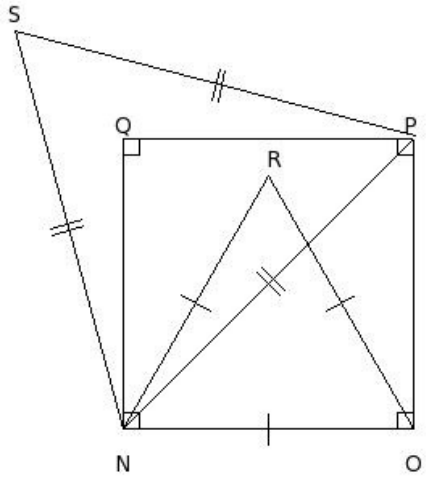
(i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) SAS Congruency

42. With the data in the figure, △FJI ≅ △GJH by which property?



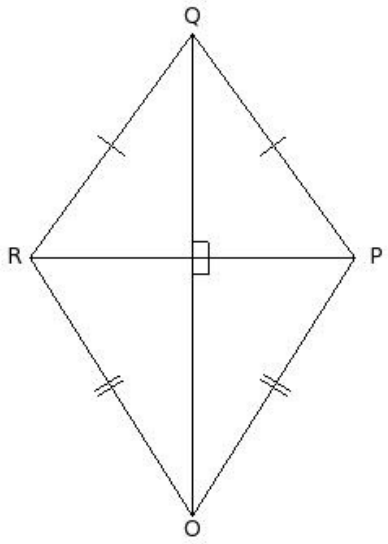
(i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency (v) not congruent

43. With the data in the figure, △NOR ≅ △NPS by which property?



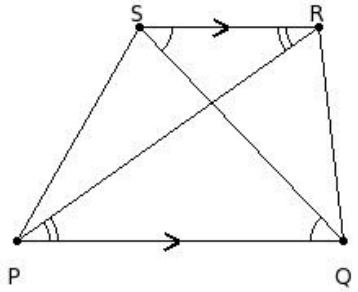
(i) SAS Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) not congruent (v) ASA Congruency

44. With the data in the given figure, △OPR ≅ △QPR by which property?



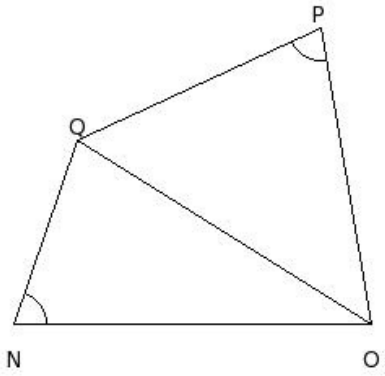
(i) ASA Congruency (ii) RHS Congruency (iii) not congruent (iv) SSS Congruency (v) SAS Congruency

45. With the data in the given figure, △PQS ≅ △QPR by which property?



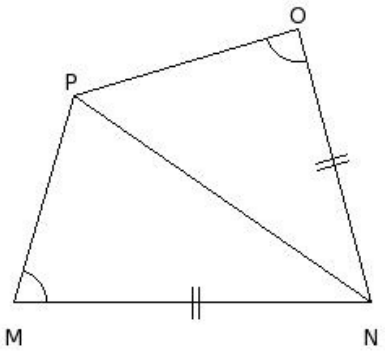
(i) SAS Congruency (ii) ASA Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

46. With the data in the given figure, △NOQ ≅ △PQO by which property?



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

47. With the data in the given figure, △MNP ≅ △ONP by which property?



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

48. In the given figure, which pair of triangles are not congruent ?

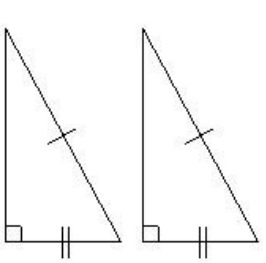


fig 3

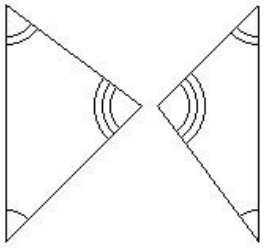


fig 4

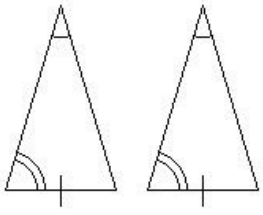


fig 1

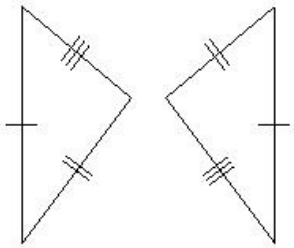


fig 2

(i) fig 4 (ii) fig 3 (iii) fig 2 (iv) fig 1

49. In the given figure, which pair of triangles are not congruent ?

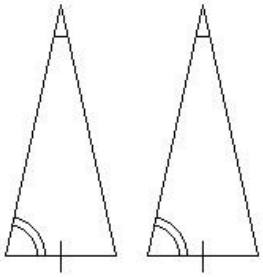


fig 3

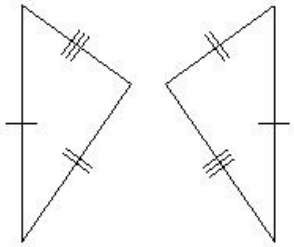


fig 4

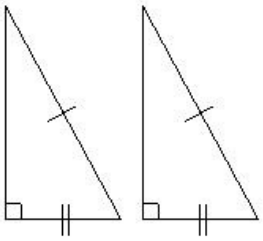


fig 1

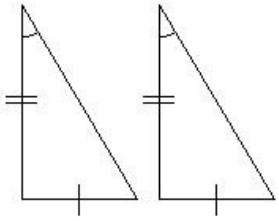


fig 2

(i) fig 3 (ii) fig 4 (iii) fig 2 (iv) fig 1

50. In the given figure, which pair of triangles are not congruent ?

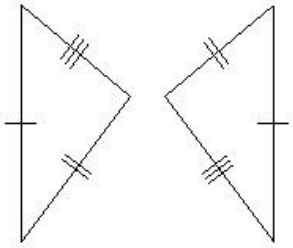


fig 3

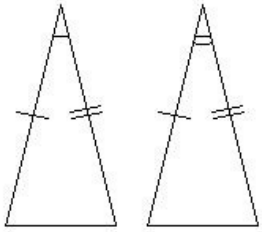


fig 4

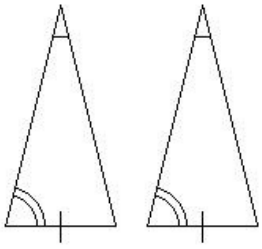


fig 1

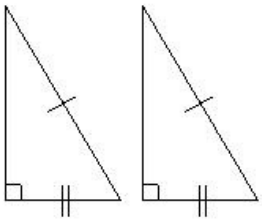


fig 2

(i) fig 3 (ii) fig 1 (iii) fig 2 (iv) fig 4

Assignment Key

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