EduSahara™ Assignment

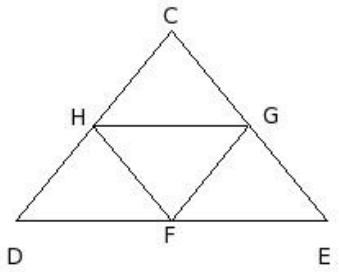
Name : Congruency of Triangles

Chapter : Triangles

Grade : ICSE Grade VIII

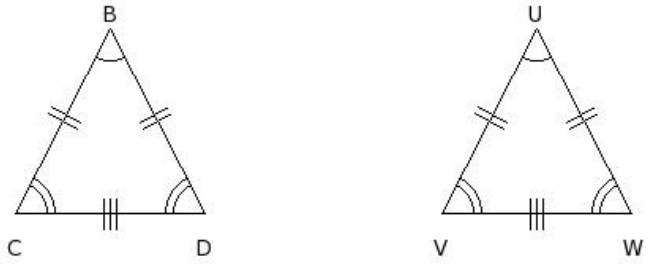
1. In the given figure, points F , G and H are the mid-points of sides DE, EC and CD of △CDE. Which of the following are true?

a) △CHG ≅ △FGH
b) △HDF ≅ △CHG
c) △CHG ≅ △GFE
d) △CHG ≅ △FHG
e) △HDF ≅ △FGH



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

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



(i) △BCD ≅ △VWU (ii) △CDB ≅ △UVW (iii) △BCD ≅ △WUV (iv) △BCD ≅ △WVU (v) △BCD ≅ △UVW

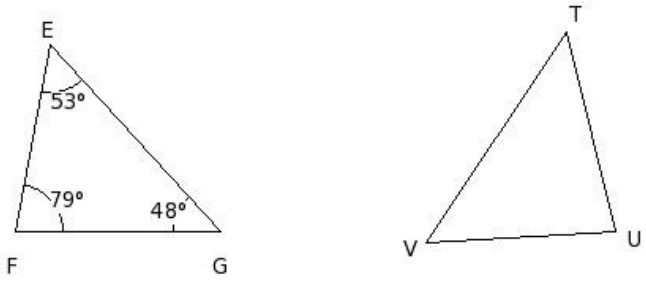
3. In the given figure, △ABC ≅ △RQP. Which of the following are true?

a) ∠C = ∠P
b) ∠A = ∠P
c) BC = RQ
d) BC = QP
e) ∠B = ∠Q

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

4. In the given figure, △EFG ≅ △VUT. Which of the following are true?

a) ∠V = 53°
b) ∠U = 48°
c) ∠V = 79°
d) ∠T = 48°
e) ∠T = 53°
f) ∠U = 79°



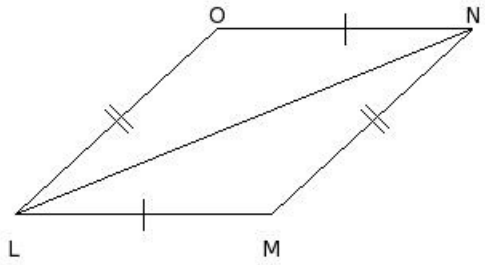
(i) {c,a,d} (ii) {a,d,f} (iii) {c,d} (iv) {e,b,f} (v) {b,a}

5. In the given figure, △ABC ≅ △RST. Which of the following are true?

a) RS = 15 cm
b) ST = 14 cm
c) ST = 15 cm
d) RS = 14 cm
e) TR = 13 cm
f) TR = 14 cm

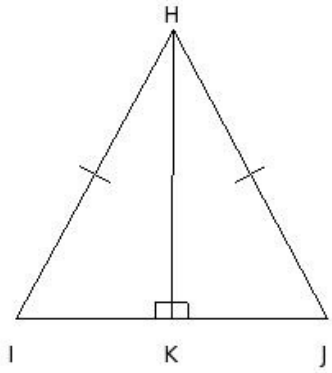
(i) {a,c} (ii) {c,d,e} (iii) {b,c,d} (iv) {b,d} (v) {f,a,e}

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



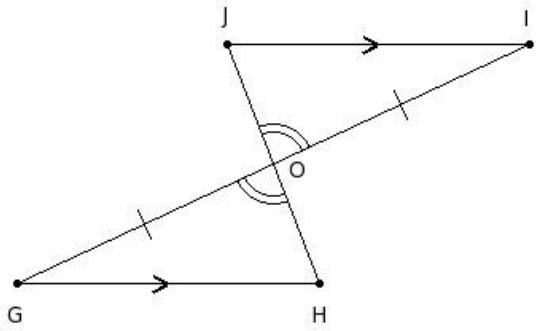
(i) △LNO ≅ △LMN (ii) △LNO ≅ △LNM (iii) △LNO ≅ △NLM (iv) △LON ≅ △MNL (v) △LON ≅ △LMN

7. With the data in the given figure, △HIK ≅ △HJK by which property?



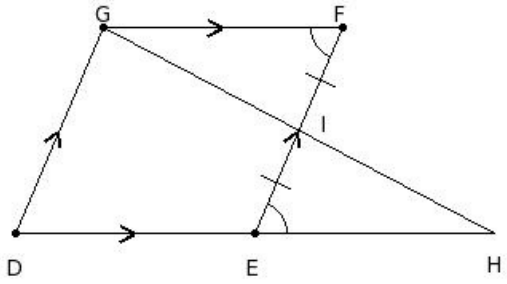
(i) ASA Congruency (ii) not congruent (iii) SSS Congruency (iv) SAS Congruency (v) RHS Congruency

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



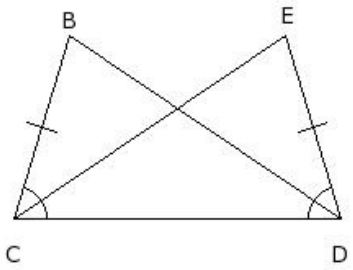
(i) SSS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) not congruent (v) SAS Congruency

9. With the given data in the figure, △GFI ≅ △HEI by which property?



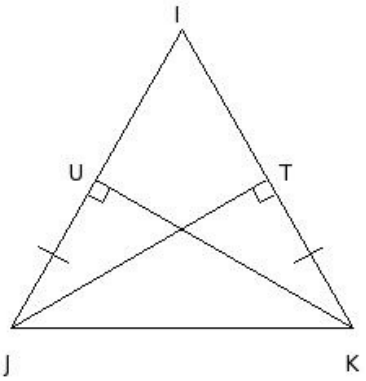
(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) SAS Congruency (v) ASA Congruency

10. With the given data in the figure, △BCD ≅ △EDC by which property?



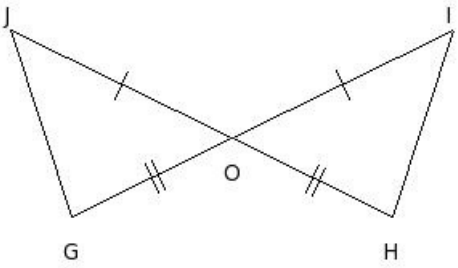
(i) SAS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) RHS Congruency

11. With the given data in the figure, △UJK ≅ △TKJ by which property?



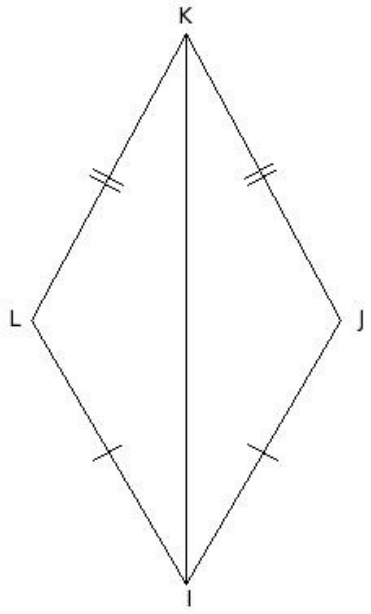
(i) SSS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) not congruent (v) SAS Congruency

12. With the data in the given figure, △GJO ≅ △HIO by which property?



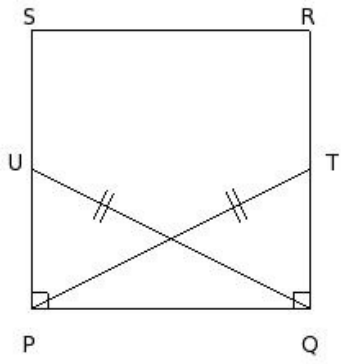
(i) not congruent (ii) SSS Congruency (iii) RHS Congruency (iv) ASA Congruency (v) SAS Congruency

13. With the data in the given figure, △ILK ≅ △IJK by which property?



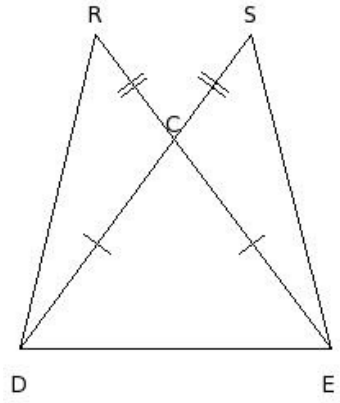
(i) RHS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) not congruent (v) SAS Congruency

14. With the data in the given figure, △UPQ ≅ △TQP by which property?



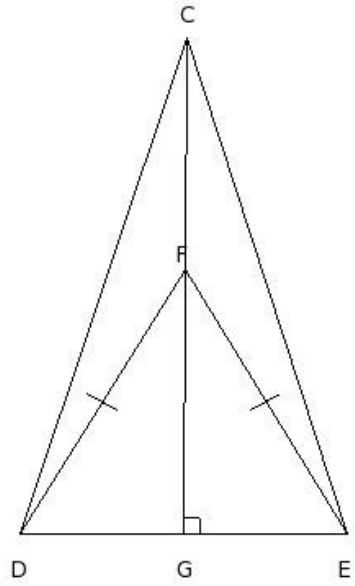
(i) not congruent (ii) SSS Congruency (iii) SAS Congruency (iv) RHS Congruency (v) ASA Congruency

15. With the data in the given figure, △RDE ≅ △SED by which property?



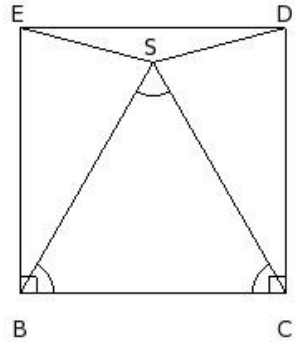
(i) ASA Congruency (ii) not congruent (iii) SAS Congruency (iv) RHS Congruency (v) SSS Congruency

16. In the given figure, △FDE is an isosceles triangle. CG ⊥ DE passing through F. △CFD ≅ △CFE by which property?



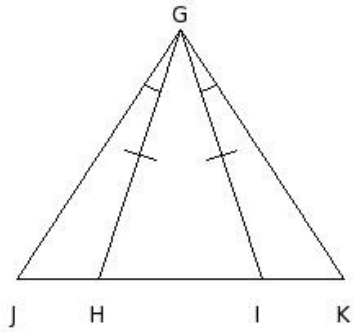
(i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

17. In the given figure, BCDE is a square and △SBC is an equilateral triangle. △SEB ≅ △SDC by which property?



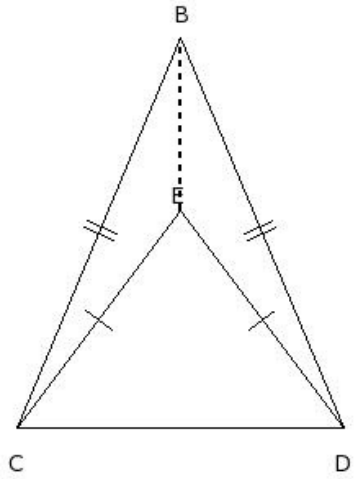
(i) RHS Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) not congruent

18. With the data in the given figure, △GHJ ≅ △GIK by which property?



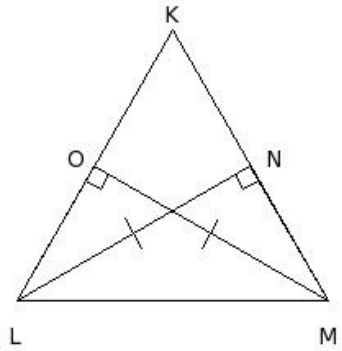
(i) SSS Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) ASA Congruency

19. With the data in the given figure, △BEC ≅ △BED by which property?



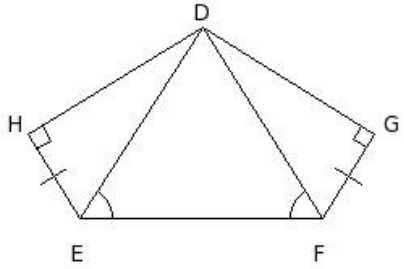
(i) not congruent (ii) ASA Congruency (iii) RHS Congruency (iv) SSS Congruency (v) SAS Congruency

20. With the data in the given figure, △LNM ≅ △MOL by which property?



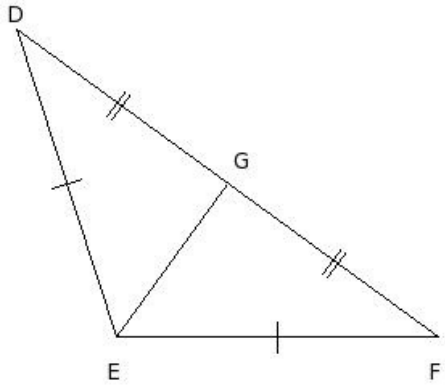
(i) SSS Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) not congruent (v) ASA Congruency

21. With the data in the given figure, △DEH ≅ △DFG by which property?



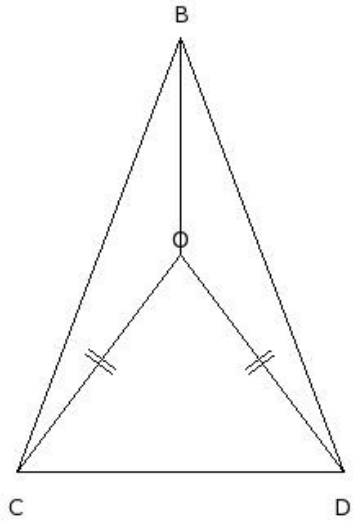
(i) SSS Congruency (ii) not congruent (iii) ASA Congruency (iv) SAS Congruency (v) RHS Congruency

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



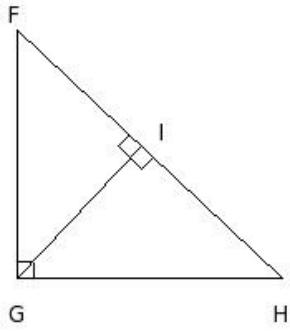
(i) SAS Congruency (ii) not congruent (iii) RHS Congruency (iv) ASA Congruency (v) SSS Congruency

23. With the data in the given figure, △BOC ≅ △BOD by which property?



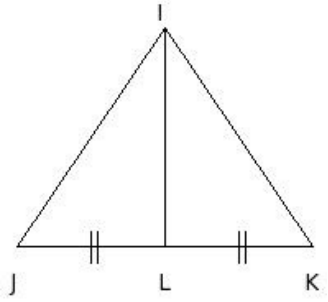
(i) SAS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) RHS Congruency (v) not congruent

24. With the data in the figure, △FIG ≅ △HIG by which property?



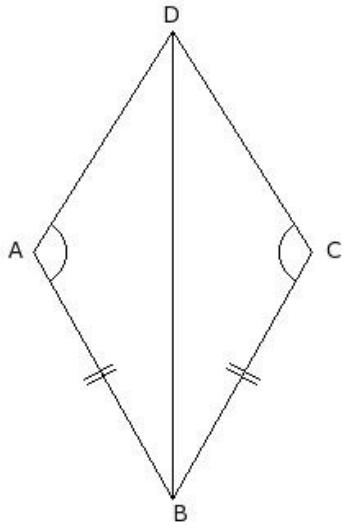
(i) ASA Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) RHS Congruency (v) not congruent

25. With the data in the figure, △ILJ ≅ △ILK by which property?



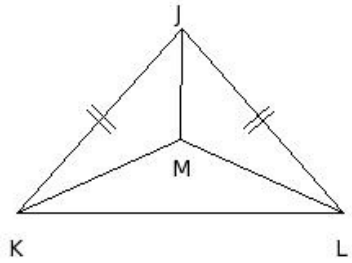
(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

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



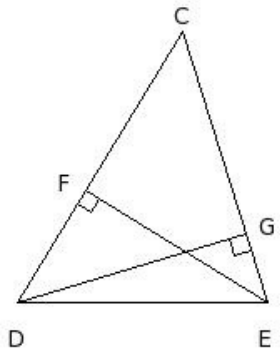
(i) SSS Congruency (ii) ASA Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency

27. With the data in the figure, △JKM ≅ △JLM by which property?



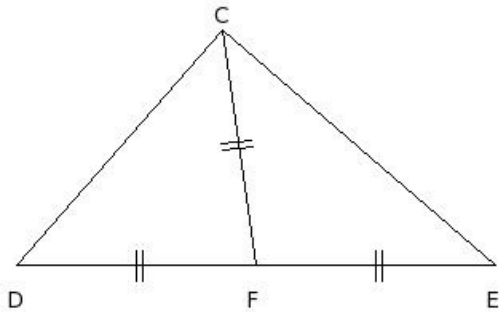
(i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) RHS Congruency (v) SSS Congruency

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



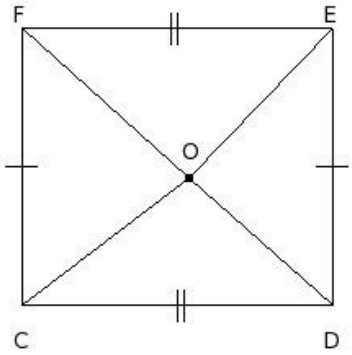
(i) SSS Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) ASA Congruency (v) not congruent

29. With the data in the figure, △CFD ≅ △CFE by which property?



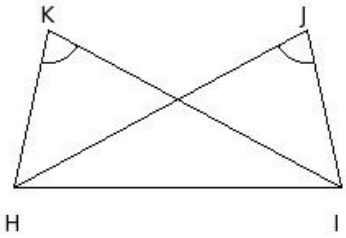
(i) not congruent (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency (v) ASA Congruency

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



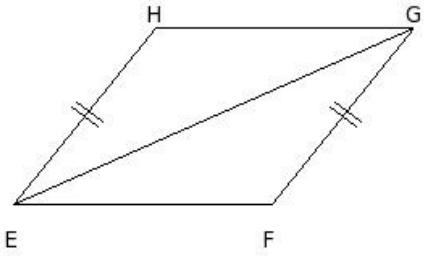
(i) SSS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) not congruent (v) RHS Congruency

31. With the data in the figure, △HIK ≅ △IHJ by which property?



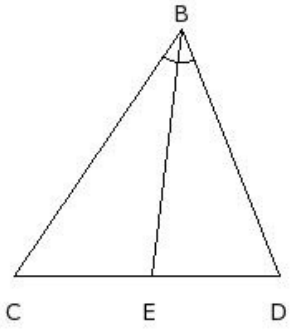
(i) SSS Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) not congruent (v) ASA Congruency

32. With the data in the figure, △EGH ≅ △GEF by which property?



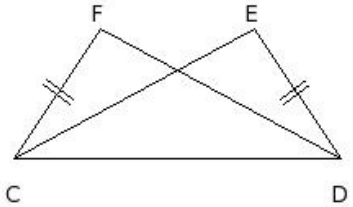
(i) RHS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) SSS Congruency (v) not congruent

33. With the data in the figure, △BEC ≅ △BED by which property?



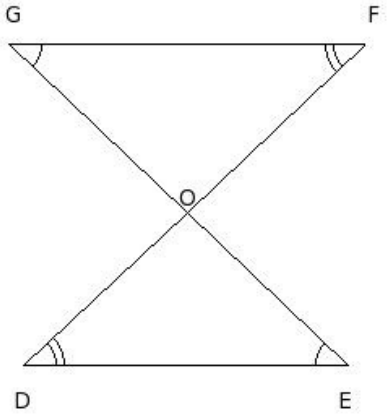
(i) not congruent (ii) SSS Congruency (iii) RHS Congruency (iv) ASA Congruency (v) SAS Congruency

34. With the data in the figure, △CFD ≅ △DEC by which property?



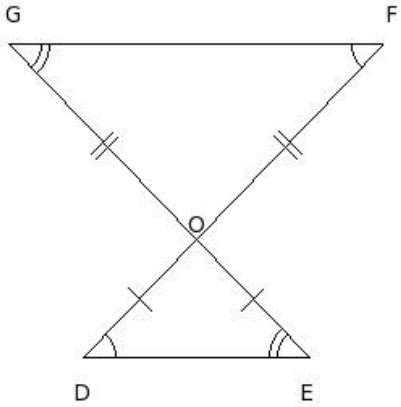
(i) not congruent (ii) SAS Congruency (iii) SSS Congruency (iv) RHS Congruency (v) ASA Congruency

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



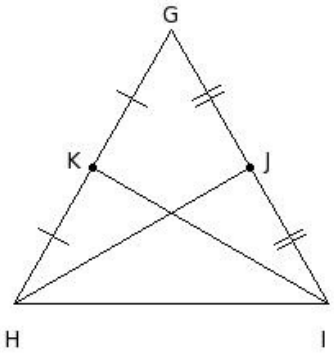
(i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) RHS Congruency

36. With the data in the figure, △DOE ≅ △FOG by which property?



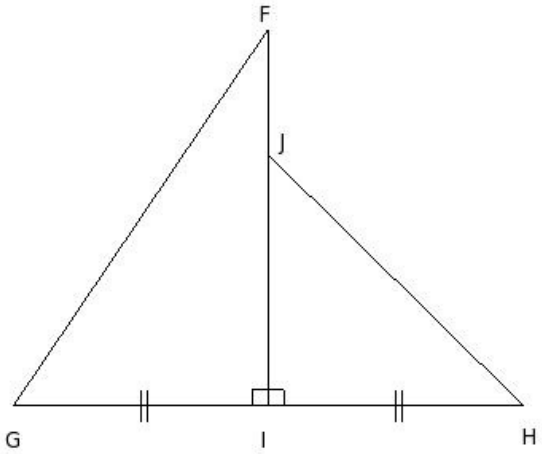
(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

37. With the data in the figure, △HIK ≅ △IHJ by which property?



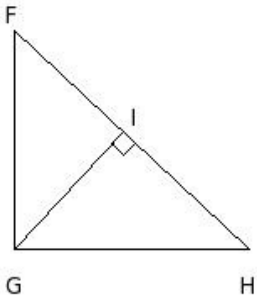
(i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) SAS Congruency

38. With the data in the figure, △FGI ≅ △JHI by which property?



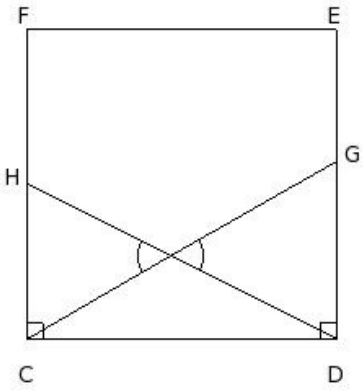
(i) RHS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) not congruent (v) SAS Congruency

39. With the data in the figure, △FGI ≅ △HGI by which property?



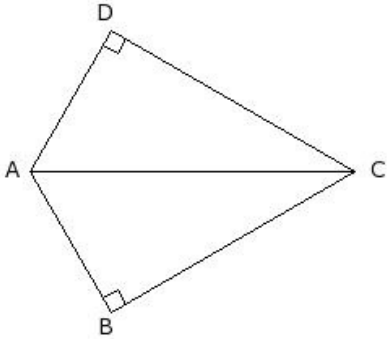
(i) RHS Congruency (ii) SSS Congruency (iii) not congruent (iv) ASA Congruency (v) SAS Congruency

40. With the data in the figure, △CDG ≅ △DCH by which property?



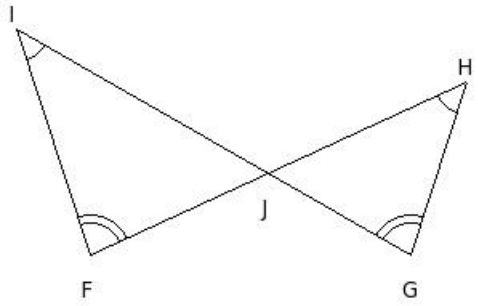
(i) ASA Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) SAS Congruency (v) not congruent

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



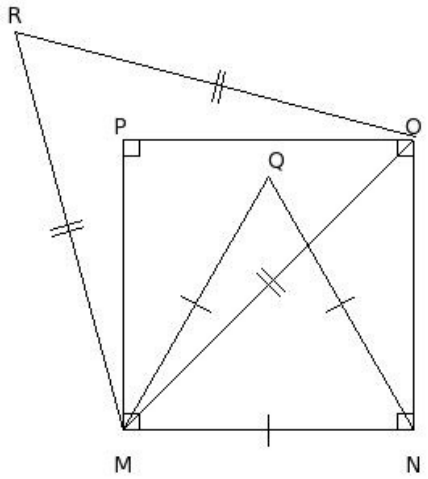
(i) ASA Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) not congruent (v) SAS Congruency

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



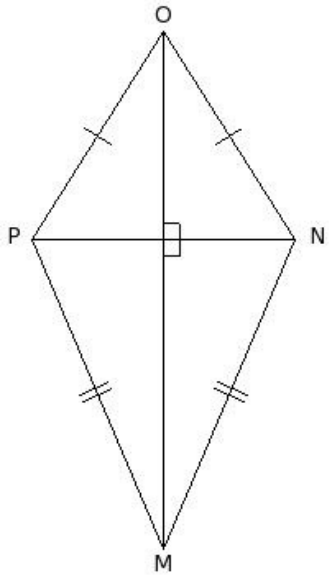
(i) SSS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) SAS Congruency (v) not congruent

43. With the data in the figure, △MNQ ≅ △MOR by which property?



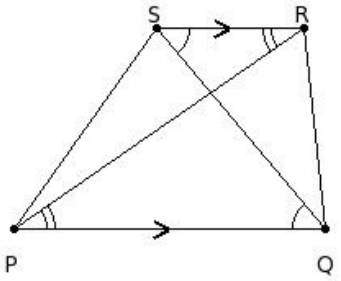
(i) RHS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) not congruent (v) SSS Congruency

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



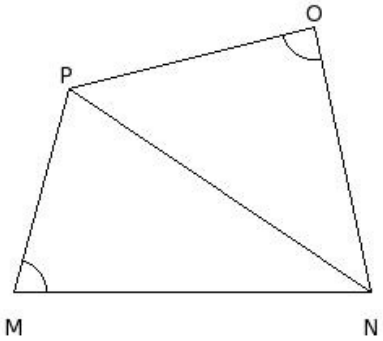
(i) SAS Congruency (ii) not congruent (iii) RHS Congruency (iv) SSS Congruency (v) ASA Congruency

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



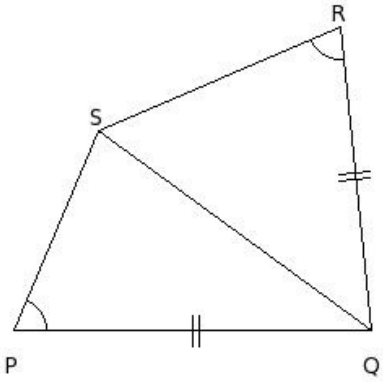
(i) not congruent (ii) ASA Congruency (iii) SSS Congruency (iv) SAS Congruency (v) RHS Congruency

46. With the data in the given figure, △MNP ≅ △OPN by which property?



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

47. With the data in the given figure, △PQS ≅ △RQS by which property?



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

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

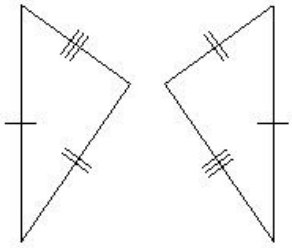


fig 3

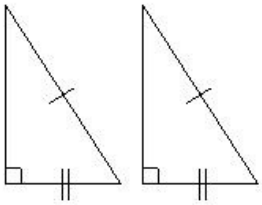


fig 4

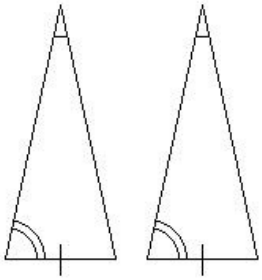


fig 1

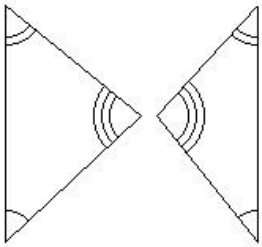


fig 2

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

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

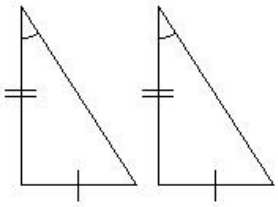


fig 3

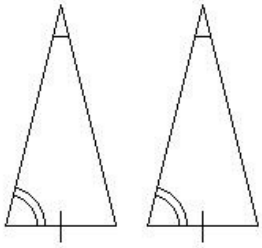


fig 4

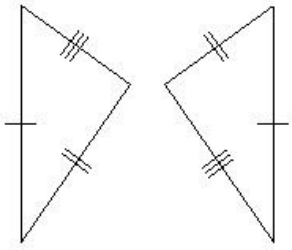


fig 1

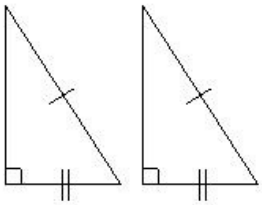


fig 2

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

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

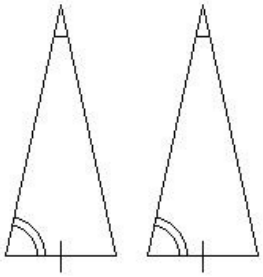


fig 3

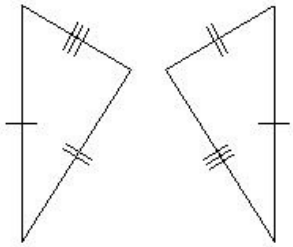


fig 4

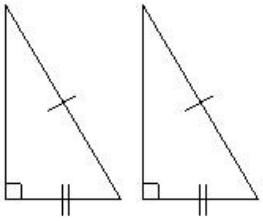


fig 1

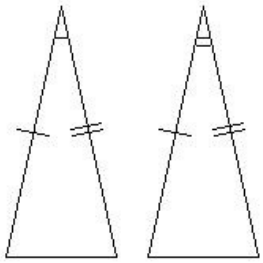


fig 2

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

Assignment Key

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