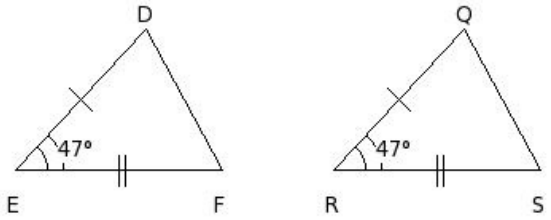
EduSahara™ Assignment

Name : Congruency of Triangles

Chapter : Congruency of Triangles

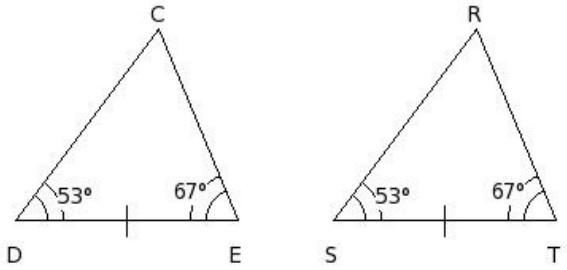
Grade : SSC Grade VII

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



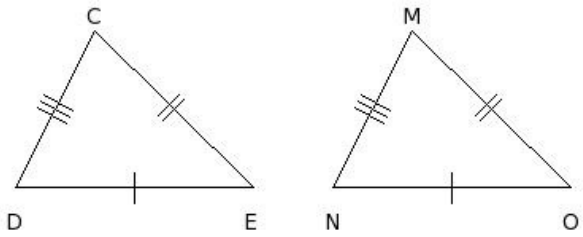
(i) RHS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) SAS Congruency

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



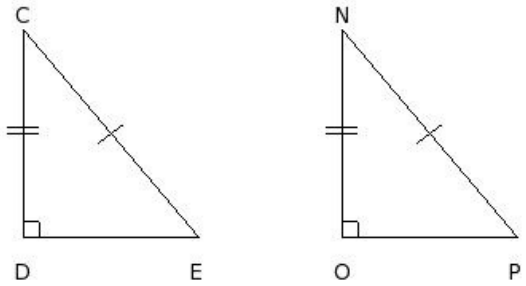
(i) ASA Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) SAS Congruency

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) SSS Congruency (iv) SAS Congruency

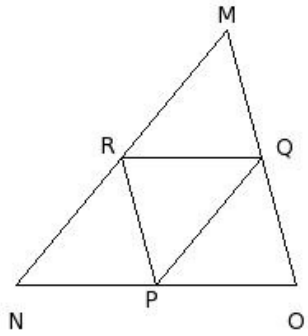
5. Which of the following are true?

a) Area of the union of two polygonal region is not equal to the sum of the individual area.
b) A polygonal region can be divided into a finite number of triangles in a unique way.
c) Area of a convex polygonal region is equal to the sum of the areas of all triangles formed by joining the vertices of the polygon with an interior point.
d) Area of the union of two polygonal region is the sum of the individual area.

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

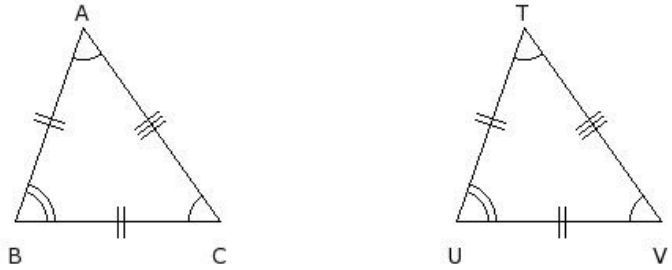
6. In the given figure, points P , Q and R are the mid-points of sides NO, OM and MN of △MNO. Which of the following are true?

a) △RNP ≅ △MRQ
b) △RNP ≅ △PQR
c) △MRQ ≅ △PQR
d) △MRQ ≅ △QPO
e) △MRQ ≅ △PRQ



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

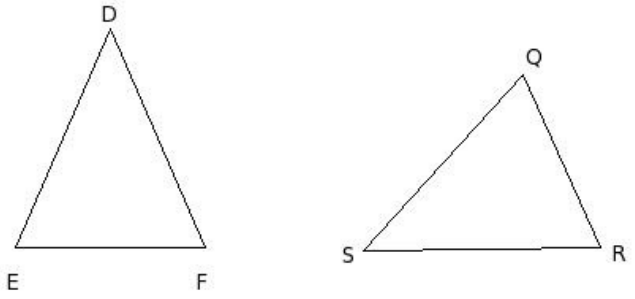
7. In the given figure, which of the following is true?



(i) △ABC ≅ △UVT (ii) △ABC ≅ △VTU (iii) △ABC ≅ △TUV (iv) △BCA ≅ △TUV (v) △ABC ≅ △VUT

8. In the given figure, △DEF ≅ △SRQ. Which of the following are true?

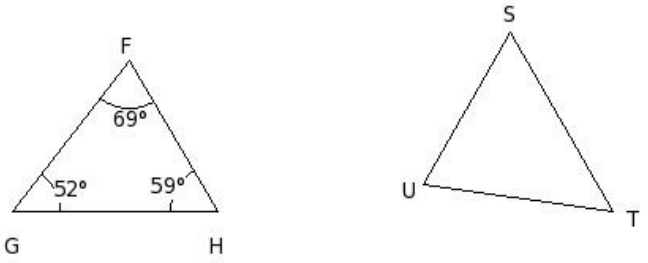
a) EF = SR
b) ∠D = ∠Q
c) ∠E = ∠R
d) ∠F = ∠Q
e) EF = RQ



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

9. In the given figure, △FGH ≅ △UTS. Which of the following are true?

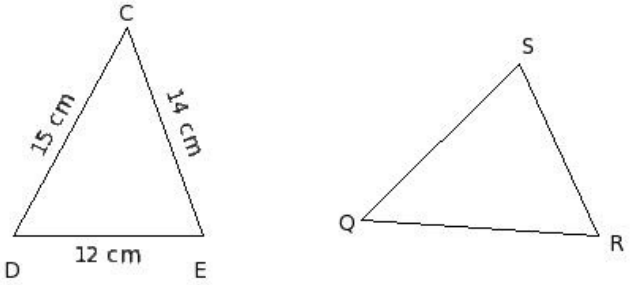
a) ∠U = 69°
b) ∠T = 52°
c) ∠S = 69°
d) ∠T = 59°
e) ∠U = 52°
f) ∠S = 59°



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

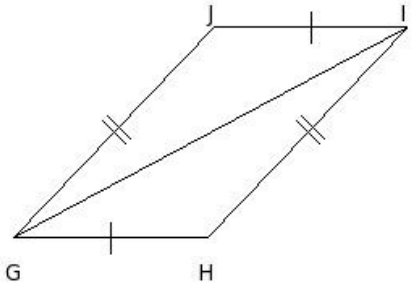
10. In the given figure, △CDE ≅ △QRS. Which of the following are true?

a) RS = 12 cm
b) SQ = 15 cm
c) RS = 15 cm
d) QR = 12 cm
e) SQ = 14 cm
f) QR = 15 cm



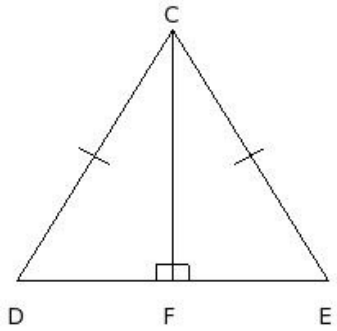
(i) {c,e} (ii) {a,e,f} (iii) {d,b,f} (iv) {b,a} (v) {c,a,e}

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



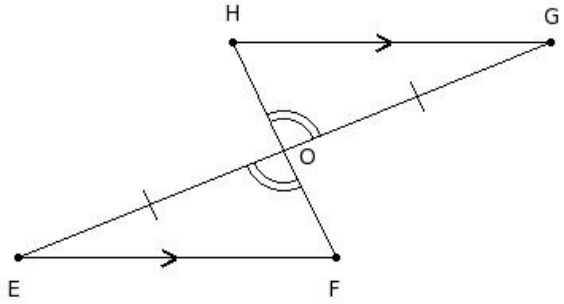
(i) △GIJ ≅ △GHI (ii) △GIJ ≅ △IGH (iii) △GJI ≅ △HIG (iv) △GIJ ≅ △GIH (v) △GJI ≅ △GHI

12. With the data in the given figure, △CDF ≅ △CEF by which property?



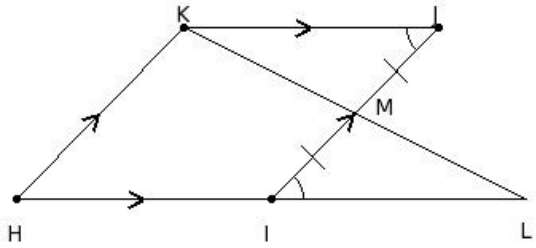
(i) ASA Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) SSS Congruency

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



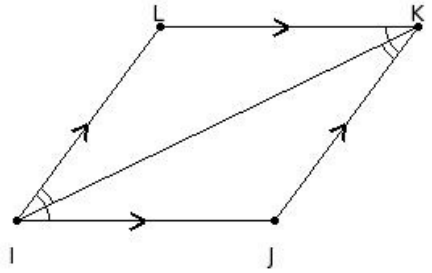
(i) ASA Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) not congruent (v) SAS Congruency

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



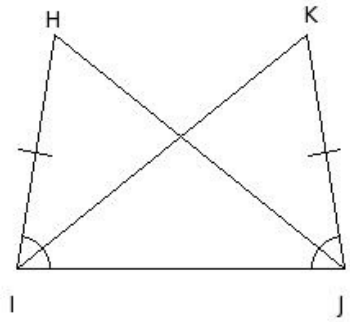
(i) SAS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) not congruent (v) SSS Congruency

15. With the given data in the figure, △IJK ≅ △KLI by which property?



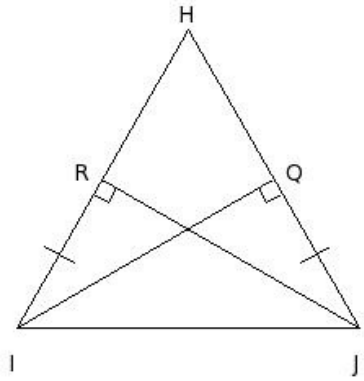
(i) SAS Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) not congruent (v) ASA Congruency

16. With the given data in the figure, △HIJ ≅ △KJI by which property?



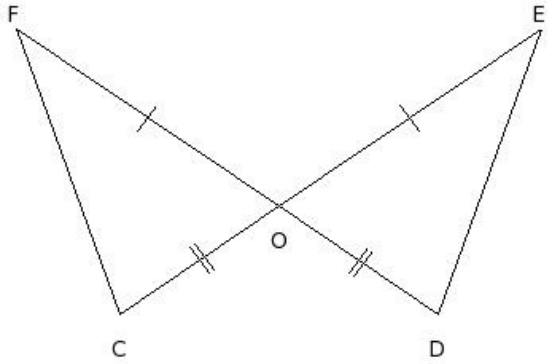
(i) SSS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) not congruent (v) RHS Congruency

17. With the given data in the figure, △RIJ ≅ △QJI by which property?



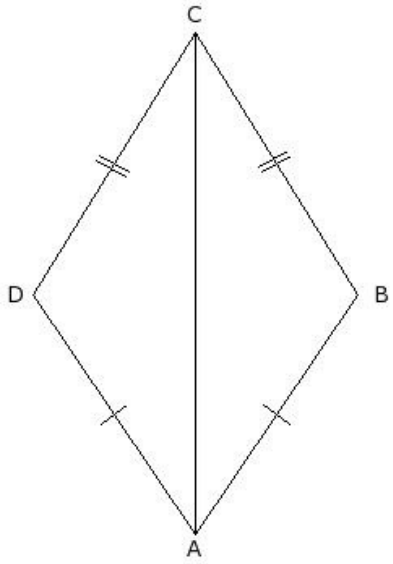
(i) ASA Congruency (ii) not congruent (iii) SAS Congruency (iv) RHS Congruency (v) SSS Congruency

18. With the data in the given figure, △CFO ≅ △DEO by which property?



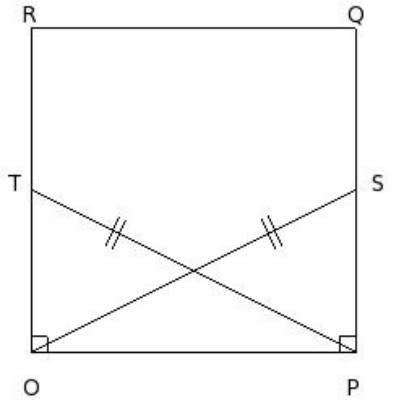
(i) ASA Congruency (ii) RHS Congruency (iii) not congruent (iv) SSS Congruency (v) SAS Congruency

19. With the data in the given figure, △ADC ≅ △ABC by which property?



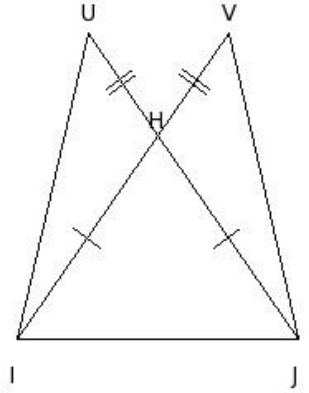
(i) SSS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) not congruent (v) RHS Congruency

20. With the data in the given figure, △TOP ≅ △SPO by which property?



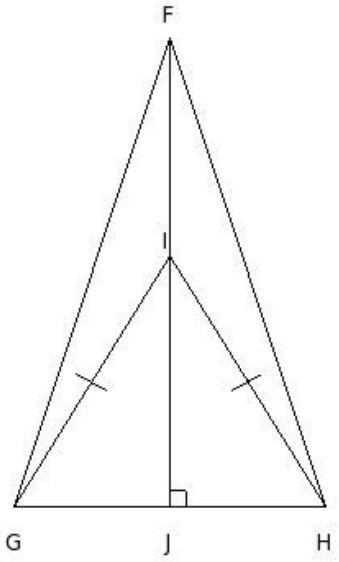
(i) RHS Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) ASA Congruency

21. With the data in the given figure, △UIJ ≅ △VJI by which property?



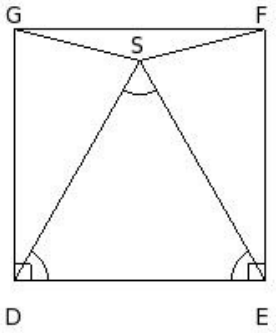
(i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

22. In the given figure, △IGH is an isosceles triangle. FJ ⊥ GH passing through I. △FIG ≅ △FIH by which property?



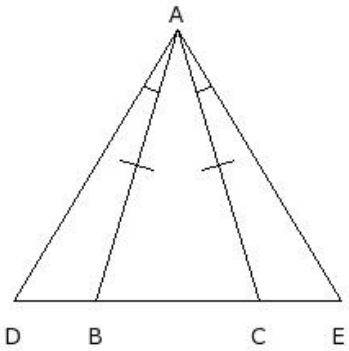
(i) RHS Congruency (ii) ASA Congruency (iii) not congruent (iv) SAS Congruency (v) SSS Congruency

23. In the given figure, DEFG is a square and △SDE is an equilateral triangle. △SGD ≅ △SFE by which property?



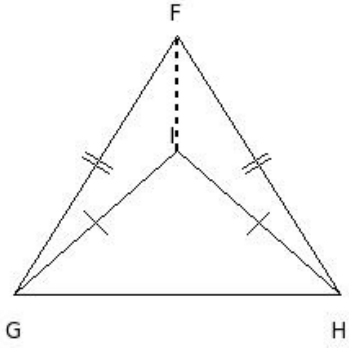
(i) not congruent (ii) SAS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) SSS Congruency

24. With the data in the given figure, △ABD ≅ △ACE by which property?



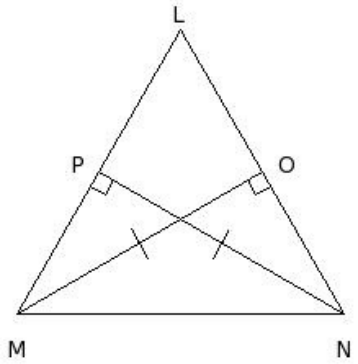
(i) not congruent (ii) SAS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency

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



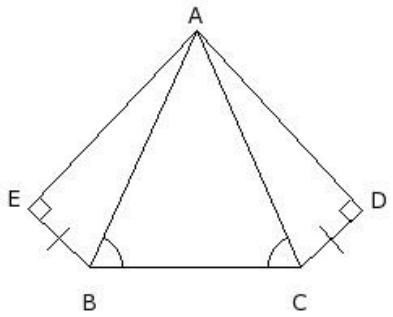
(i) RHS Congruency (ii) ASA Congruency (iii) not congruent (iv) SAS Congruency (v) SSS Congruency

26. With the data in the given figure, △MON ≅ △NPM by which property?



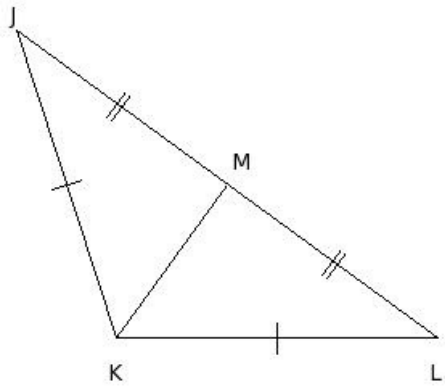
(i) not congruent (ii) RHS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) SSS Congruency

27. With the data in the given figure, △ABE ≅ △ACD by which property?



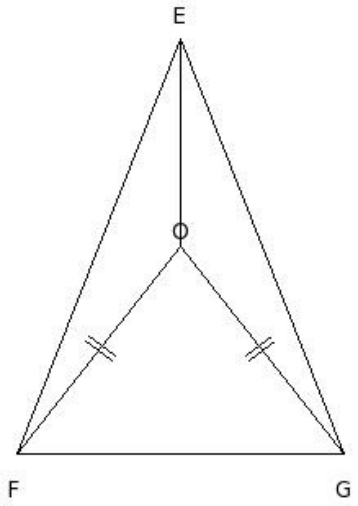
(i) ASA Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) not congruent (v) RHS Congruency

28. In the given figure, △JKL is an obtuse angled triangle. △JKM ≅ △LKM by which property?



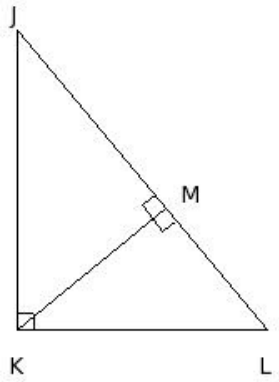
(i) not congruent (ii) SSS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) RHS Congruency

29. With the data in the given figure, △EOF ≅ △EOG by which property?



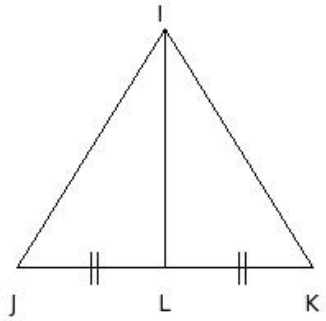
(i) not congruent (ii) SSS Congruency (iii) RHS Congruency (iv) SAS Congruency (v) ASA Congruency

30. With the data in the figure, △JMK ≅ △LMK by which property?



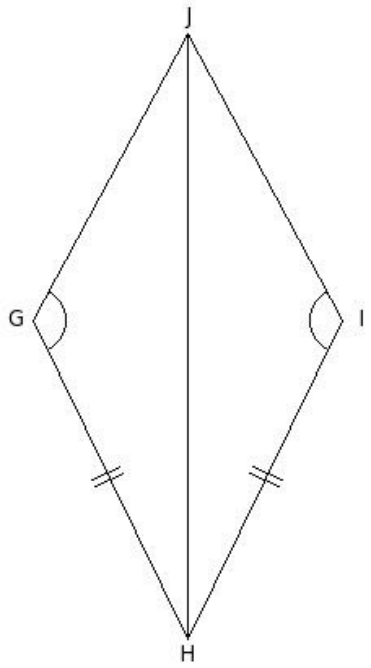
(i) SAS Congruency (ii) SSS Congruency (iii) not congruent (iv) ASA Congruency (v) RHS Congruency

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



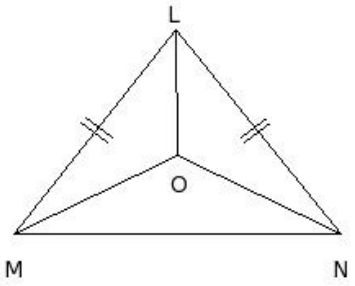
(i) SAS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) not congruent (v) SSS Congruency

32. With the data in the figure, △GJH ≅ △IJH by which property?



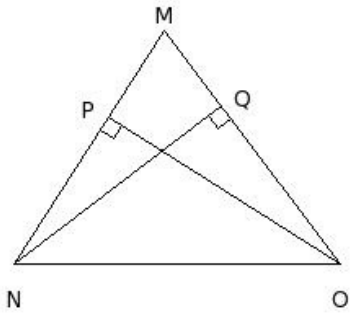
(i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

33. With the data in the figure, △LMO ≅ △LNO by which property?



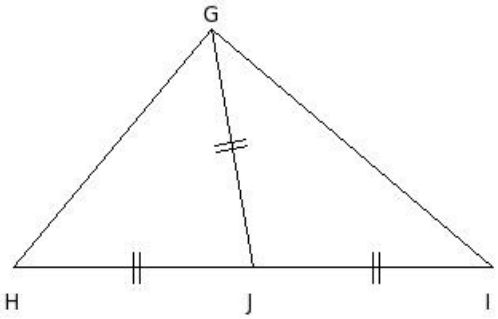
(i) SAS Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) not congruent (v) ASA Congruency

34. With the data in the figure, △NQO ≅ △OPN by which property?



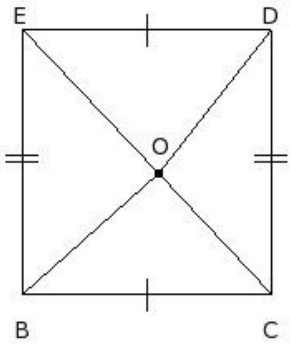
(i) not congruent (ii) ASA Congruency (iii) SSS Congruency (iv) SAS Congruency (v) RHS Congruency

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



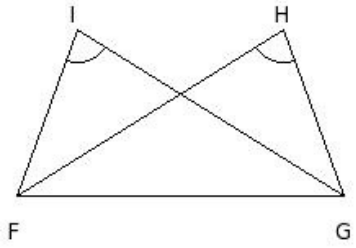
(i) RHS Congruency (ii) not congruent (iii) ASA Congruency (iv) SSS Congruency (v) SAS Congruency

36. With the data in the figure, △BOC ≅ △EOD by which property?



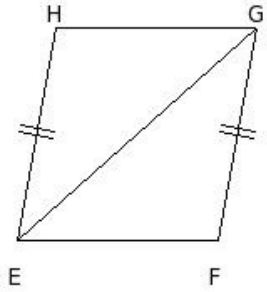
(i) not congruent (ii) RHS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

37. With the data in the figure, △FGI ≅ △GFH by which property?



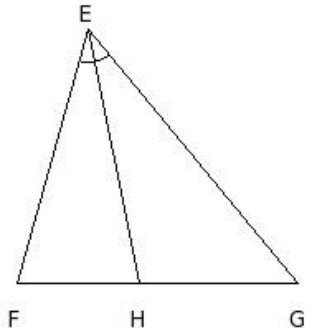
(i) SAS Congruency (ii) ASA Congruency (iii) not congruent (iv) RHS Congruency (v) SSS Congruency

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



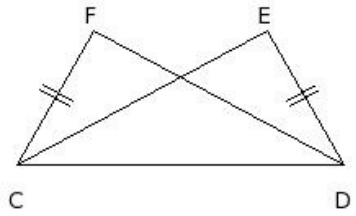
(i) SAS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) not congruent (v) RHS Congruency

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



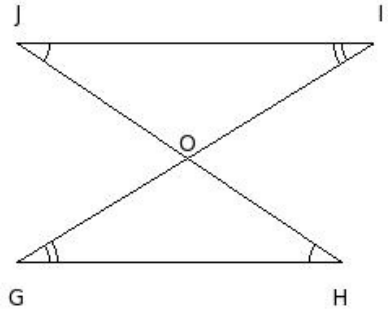
(i) not congruent (ii) SAS Congruency (iii) SSS Congruency (iv) RHS Congruency (v) ASA Congruency

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



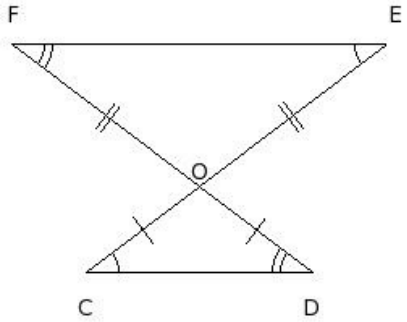
(i) RHS Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) not congruent (v) ASA Congruency

41. With the data in the figure, △GOH ≅ △IOJ by which property?



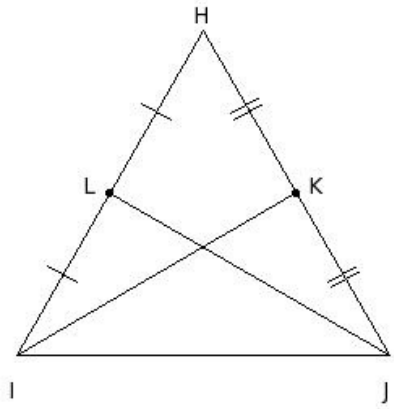
(i) not congruent (ii) SAS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) SSS Congruency

42. With the data in the figure, △COD ≅ △EOF by which property?



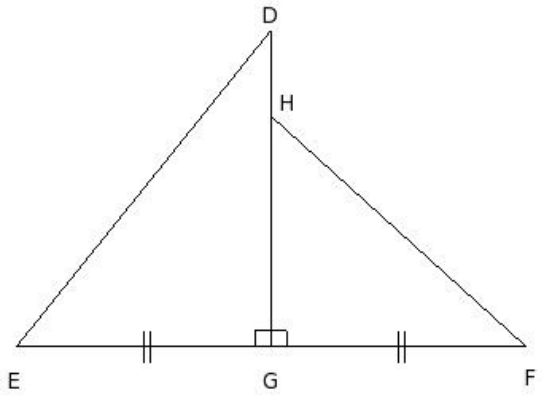
(i) SAS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) not congruent

43. With the data in the figure, △IJL ≅ △JIK by which property?



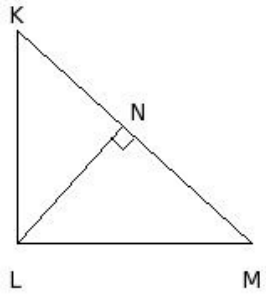
(i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) RHS Congruency

44. With the data in the figure, △DEG ≅ △HFG by which property?



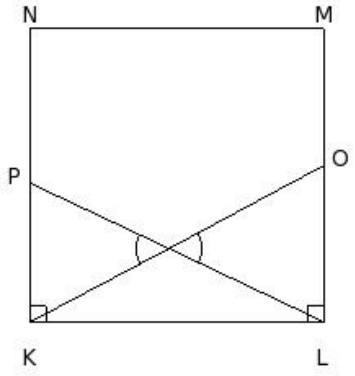
(i) not congruent (ii) RHS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) SAS Congruency

45. With the data in the figure, △KLN ≅ △MLN by which property?



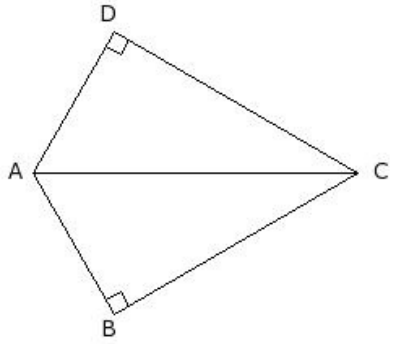
(i) RHS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) not congruent

46. With the data in the figure, △KLO ≅ △LKP by which property?



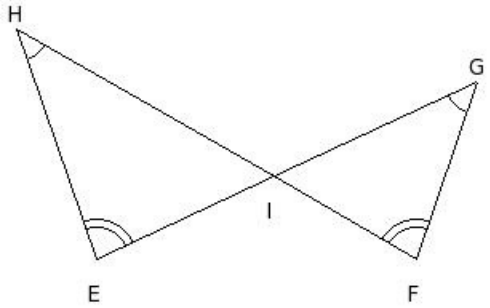
(i) SSS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) not congruent (v) SAS Congruency

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



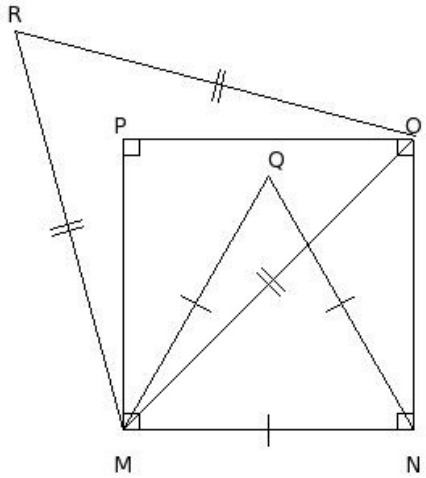
(i) SSS Congruency (ii) not congruent (iii) RHS Congruency (iv) ASA Congruency (v) SAS Congruency

48. With the data in the figure, △EIH ≅ △FIG by which property?



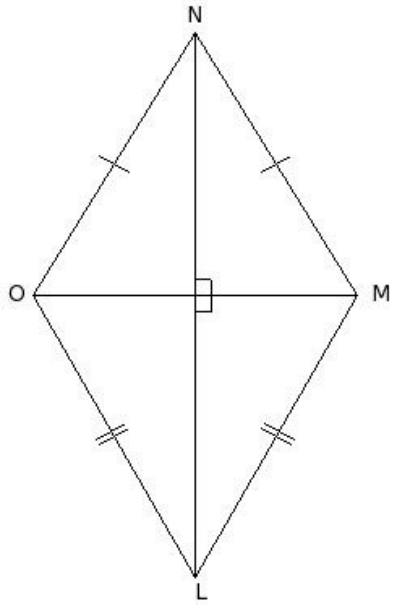
(i) RHS Congruency (ii) not congruent (iii) SAS Congruency (iv) ASA Congruency (v) SSS Congruency

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



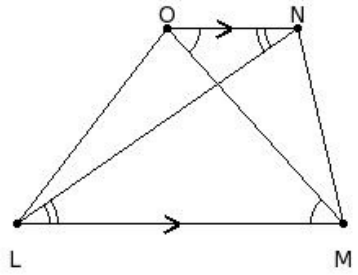
(i) SAS Congruency (ii) ASA Congruency (iii) not congruent (iv) RHS Congruency (v) SSS Congruency

50. With the data in the given figure, △LMO ≅ △NMO by which property?



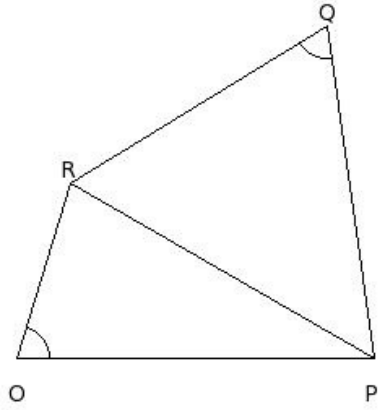
(i) not congruent (ii) ASA Congruency (iii) RHS Congruency (iv) SAS Congruency (v) SSS Congruency

51. With the data in the given figure, △LMO ≅ △MLN by which property?



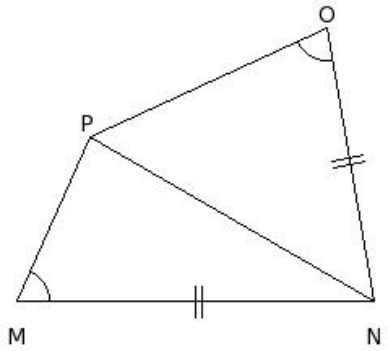
(i) ASA Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) RHS Congruency

52. With the data in the given figure, △OPR ≅ △QRP by which property?



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

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



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

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

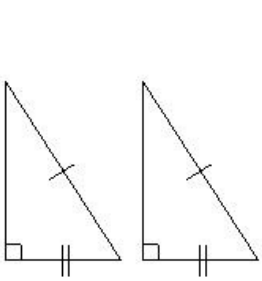


fig 3

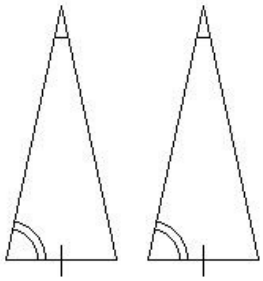


fig 4

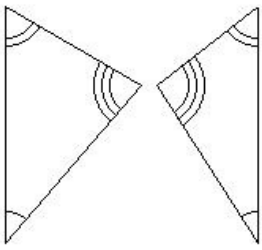


fig 1

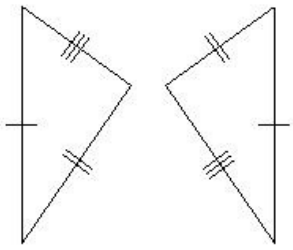


fig 2

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

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

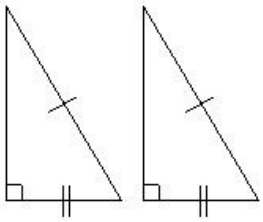


fig 3

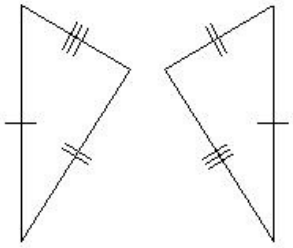


fig 4

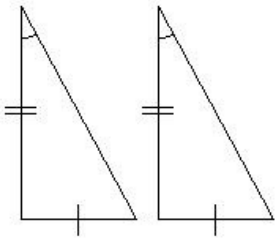


fig 1

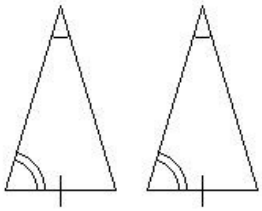


fig 2

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

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

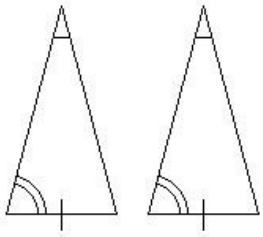


fig 3

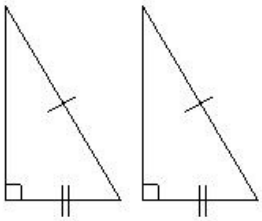


fig 4

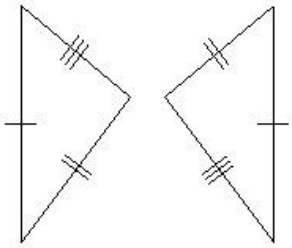


fig 1

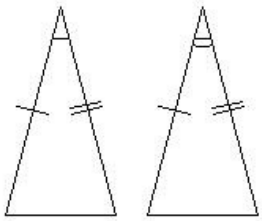


fig 2

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

Assignment Key

1) (iv)	2) (i)	3) (ii)	4) (i)	5) (ii)	6) (v)
7) (iii)	8) (iii)	9) (ii)	10) (ii)	11) (ii)	12) (ii)
13) (i)	14) (ii)	15) (v)	16) (iii)	17) (iv)	18) (v)
19) (i)	20) (i)	21) (ii)	22) (iv)	23) (ii)	24) (iii)
25) (v)	26) (ii)	27) (v)	28) (ii)	29) (i)	30) (iii)
31) (iv)	32) (iii)	33) (iv)	34) (i)	35) (ii)	36) (i)
37) (iii)	38) (iv)	39) (i)	40) (iv)	41) (i)	42) (v)
43) (i)	44) (i)	45) (v)	46) (iv)	47) (ii)	48) (ii)
49) (iii)	50) (i)	51) (iv)	52) (iv)	53) (v)	54) (ii)
55) (ii)	56) (i)				