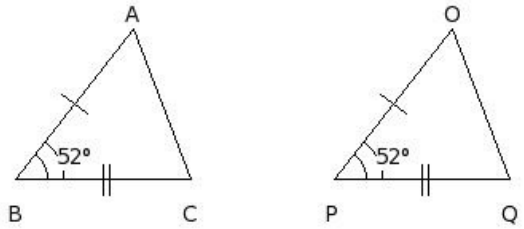
EduSahara™ Assignment

Name : Congruency of Triangles

Chapter : Congruency of Triangles

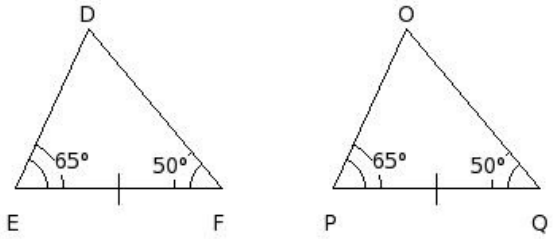
Grade : ICSE Grade VII

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



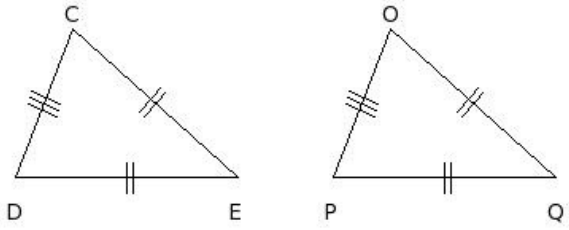
(i) ASA Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) SAS Congruency

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



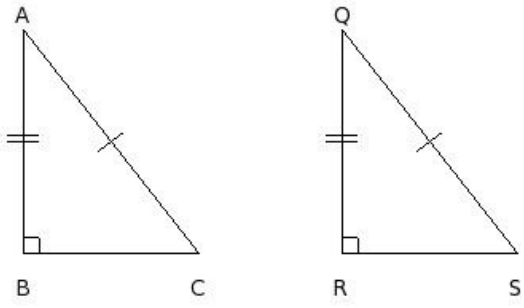
(i) SSS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) RHS Congruency

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



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

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



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

5. Which of the following are true?

a) Any two triangles are similar.
b) Any two circles are similar.
c) Any two squares are congruent.
d) Any two squares are similar.
e) Any two triangles are congruent.
f) Any two circles are congruent.

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

6. Which of the following are true?

a) A triangle is a polygonal region.
b) A square is a polygonal region.
c) A circle is a polygonal region.
d) A sector is a polygonal region.
e) A semi-circle is a polygonal region.

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

7. Which of the following are true?

a) Similar and congruent are not synonymous.
b) Congruent figures have same area.
c) Similar figures have same area.
d) If two figures are congruent, then they are similar too.
e) If two figures are similar, then they are congruent too.

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

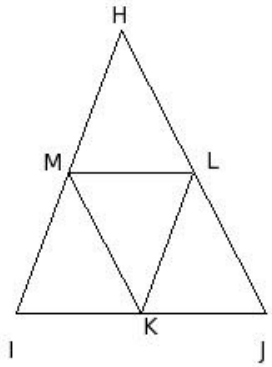
8. Which of the following are true?

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) {b,d,a} (iv) {b,a} (v) {d,c}

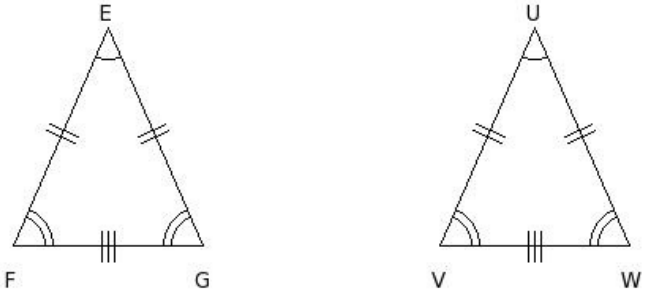
9. In the given figure, points K , L and M are the mid-points of sides IJ, JH and HI of △HIJ. Which of the following are true?

a) △HML ≅ △LKJ
b) △MIK ≅ △HML
c) △MIK ≅ △KLM
d) △HML ≅ △KML
e) △HML ≅ △KLM



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

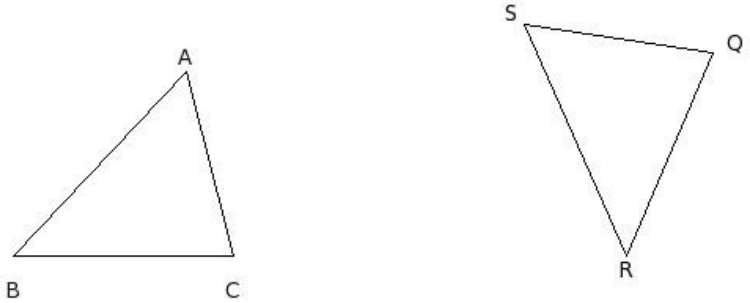
10. In the given figure, which of the following is true?



(i) △FGE ≅ △UVW (ii) △EFG ≅ △WVU (iii) △EFG ≅ △UVW (iv) △EFG ≅ △VWU (v) △EFG ≅ △WUV

11. In the given figure, △ABC ≅ △SRQ. Which of the following are true?

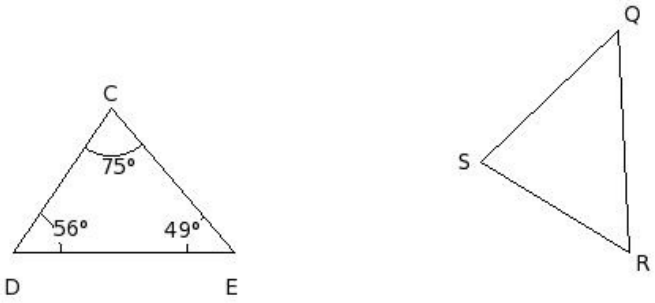
a) BC = RQ
b) ∠A = ∠Q
c) BC = SR
d) ∠C = ∠Q
e) ∠B = ∠R



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

12. In the given figure, △CDE ≅ △SRQ. Which of the following are true?

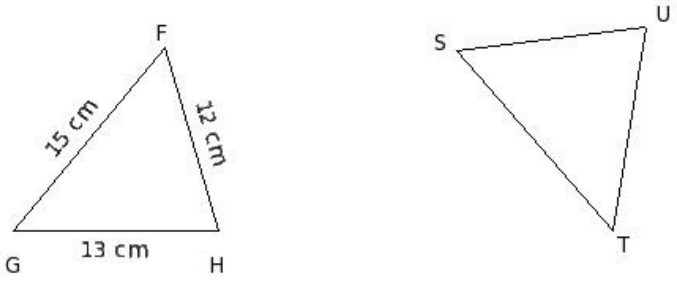
a) ∠S = 56°
b) ∠R = 49°
c) ∠Q = 49°
d) ∠Q = 75°
e) ∠R = 56°
f) ∠S = 75°



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

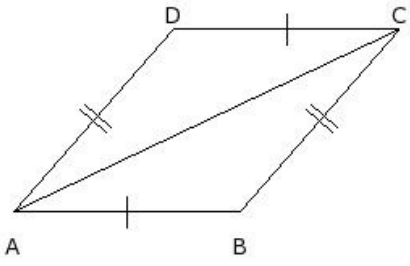
13. In the given figure, △FGH ≅ △STU. Which of the following are true?

a) US = 12 cm
b) US = 15 cm
c) TU = 13 cm
d) ST = 15 cm
e) TU = 15 cm
f) ST = 13 cm



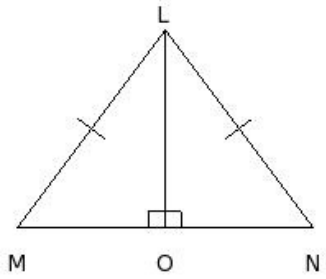
(i) {e,c} (ii) {b,a} (iii) {f,b,d} (iv) {e,a,c} (v) {a,c,d}

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



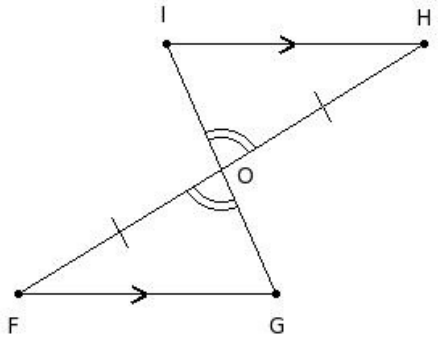
(i) △ACD ≅ △CAB (ii) △ADC ≅ △BCA (iii) △ACD ≅ △ACB (iv) △ACD ≅ △ABC (v) △ADC ≅ △ABC

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



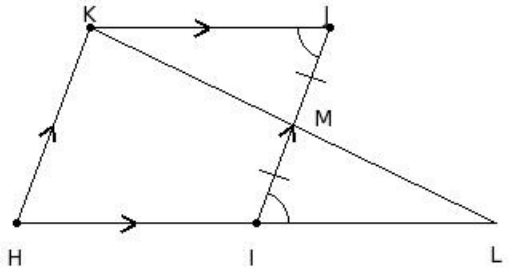
(i) RHS Congruency (ii) ASA Congruency (iii) not congruent (iv) SSS Congruency (v) SAS Congruency

16. With the data in the given figure, △OIH ≅ △OGF by which property?



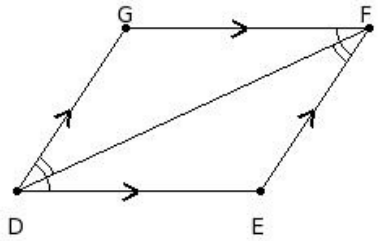
(i) not congruent (ii) SAS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency

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



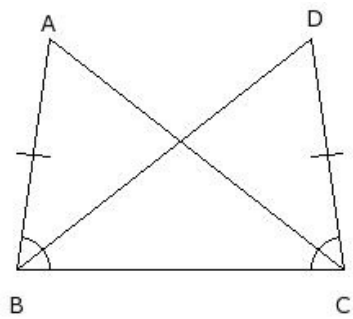
(i) SAS Congruency (ii) not congruent (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency

18. With the given data in the figure, △DEF ≅ △FGD by which property?



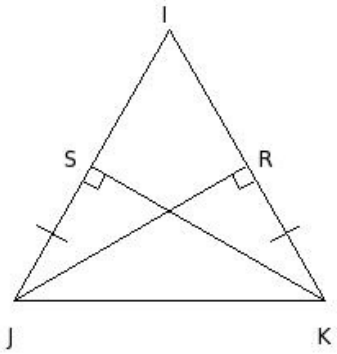
(i) ASA Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) not congruent (v) RHS Congruency

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



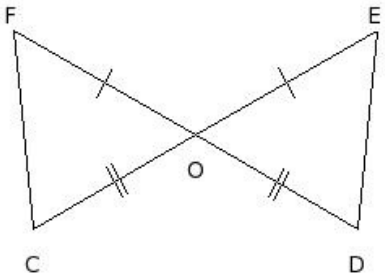
(i) SAS Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) not congruent (v) ASA Congruency

20. With the given data in the figure, △SJK ≅ △RKJ by which property?



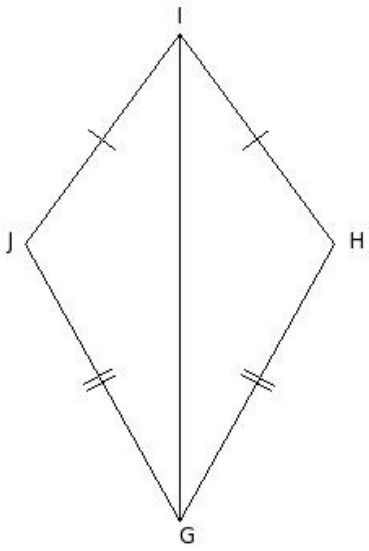
(i) SAS Congruency (ii) SSS Congruency (iii) not congruent (iv) ASA Congruency (v) RHS Congruency

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



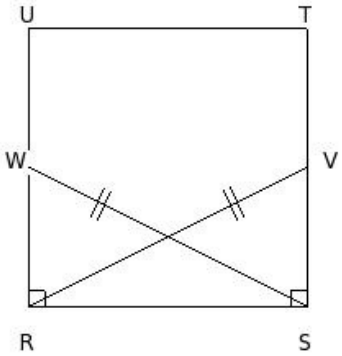
(i) SAS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) RHS Congruency

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



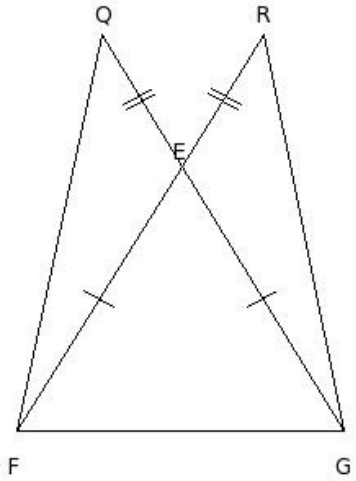
(i) RHS Congruency (ii) not congruent (iii) SAS Congruency (iv) SSS Congruency (v) ASA Congruency

23. With the data in the given figure, △WRS ≅ △VSR by which property?



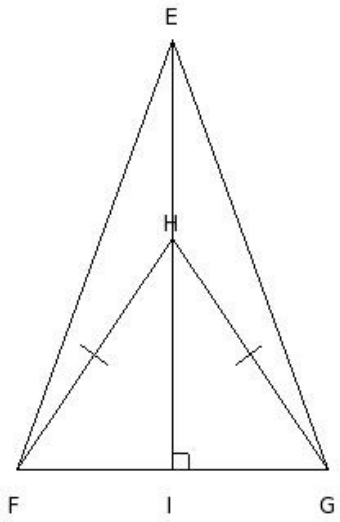
(i) RHS Congruency (ii) SAS Congruency (iii) not congruent (iv) ASA Congruency (v) SSS Congruency

24. With the data in the given figure, △QFG ≅ △RGF by which property?



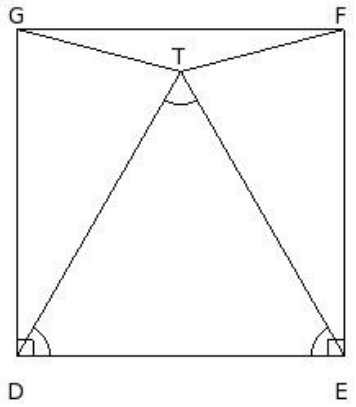
(i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) RHS Congruency (v) SSS Congruency

25. In the given figure, △HFG is an isosceles triangle. EI ⊥ FG passing through H. △EHF ≅ △EHG by which property?



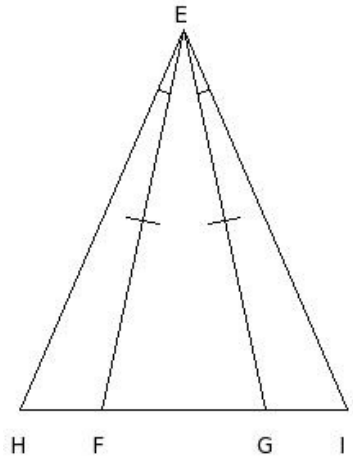
(i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) SAS Congruency

26. In the given figure, DEFG is a square and △TDE is an equilateral triangle. △TGD ≅ △TFE by which property?



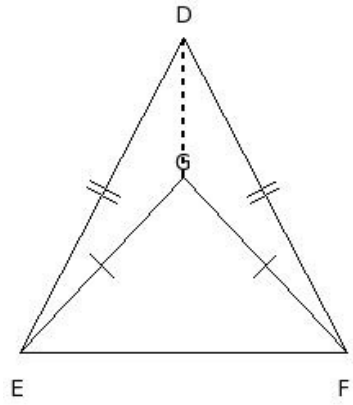
(i) SAS Congruency (ii) not congruent (iii) ASA Congruency (iv) RHS Congruency (v) SSS Congruency

27. With the data in the given figure, △EFH ≅ △EGI by which property?



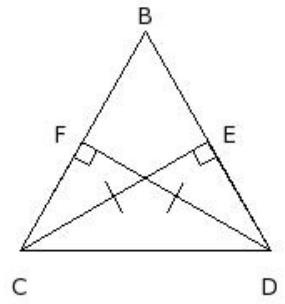
(i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency (v) not congruent

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



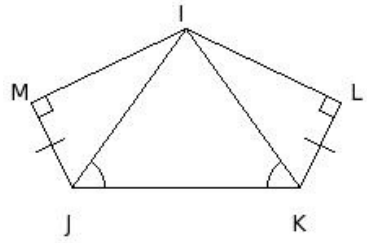
(i) ASA Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) RHS Congruency (v) not congruent

29. With the data in the given figure, △CED ≅ △DFC by which property?



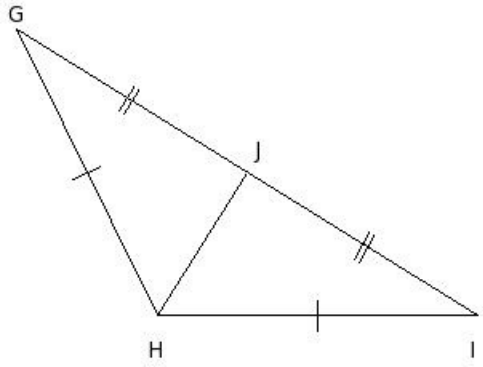
(i) SAS Congruency (ii) not congruent (iii) RHS Congruency (iv) SSS Congruency (v) ASA Congruency

30. With the data in the given figure, △IJM ≅ △IKL by which property?



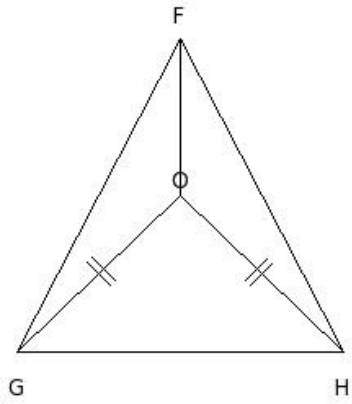
(i) RHS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) not congruent (v) SSS Congruency

31. In the given figure, △GHI is an obtuse angled triangle. △GHJ ≅ △IHJ by which property?



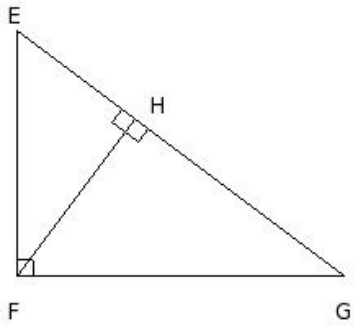
(i) ASA Congruency (ii) SSS Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency

32. With the data in the given figure, △FOG ≅ △FOH by which property?



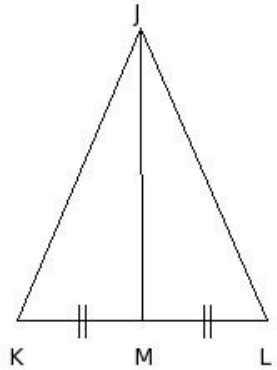
(i) not congruent (ii) RHS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

33. With the data in the figure, △EHF ≅ △GHF by which property?



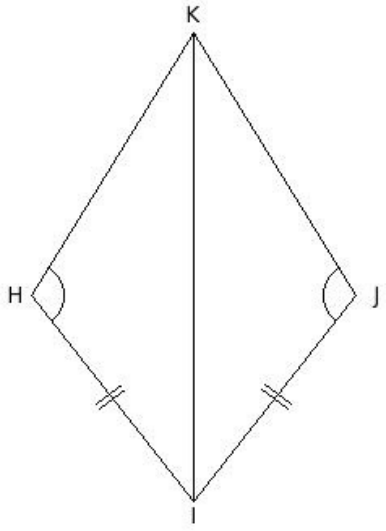
(i) SAS Congruency (ii) RHS Congruency (iii) not congruent (iv) ASA Congruency (v) SSS Congruency

34. With the data in the figure, △JMK ≅ △JML by which property?



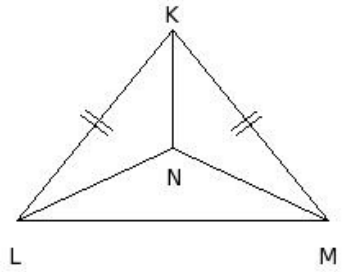
(i) ASA Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) RHS Congruency

35. With the data in the figure, △HKI ≅ △JKI by which property?



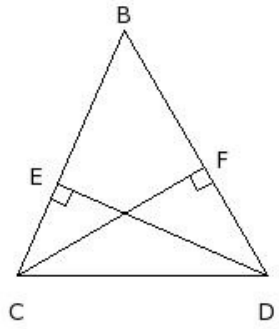
(i) ASA Congruency (ii) SSS Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency

36. With the data in the figure, △KLN ≅ △KMN by which property?



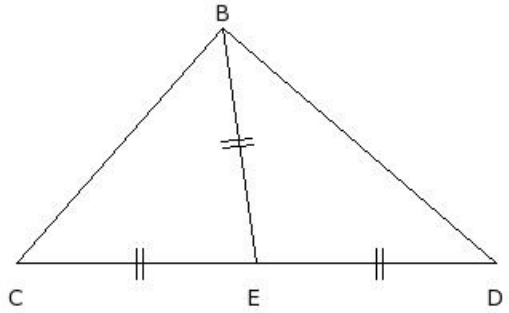
(i) RHS Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) not congruent

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



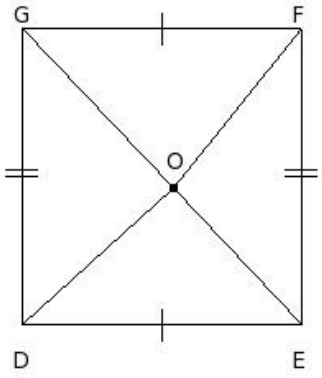
(i) SSS Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) ASA Congruency

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



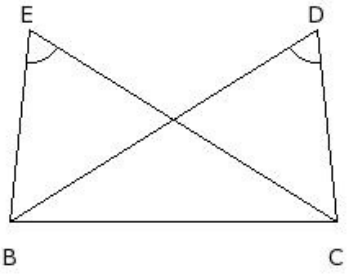
(i) RHS Congruency (ii) ASA Congruency (iii) not congruent (iv) SAS Congruency (v) SSS Congruency

39. With the data in the figure, △DOE ≅ △GOF by which property?



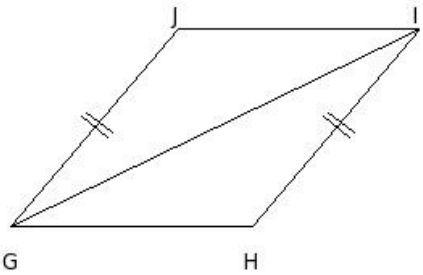
(i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

40. With the data in the figure, △BCE ≅ △CBD by which property?



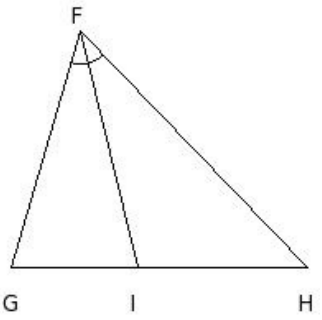
(i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) RHS Congruency

41. With the data in the figure, △GIJ ≅ △IGH by which property?



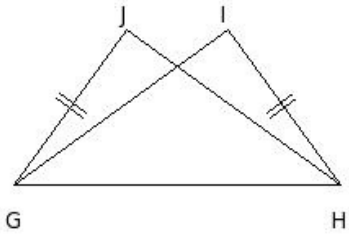
(i) ASA Congruency (ii) not congruent (iii) RHS Congruency (iv) SSS Congruency (v) SAS Congruency

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



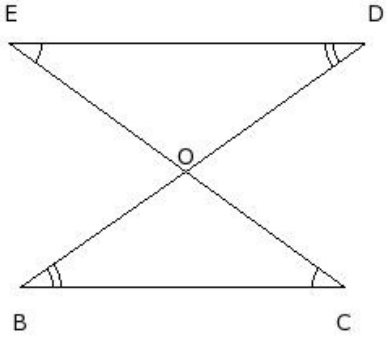
(i) not congruent (ii) RHS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

43. With the data in the figure, △GJH ≅ △HIG by which property?



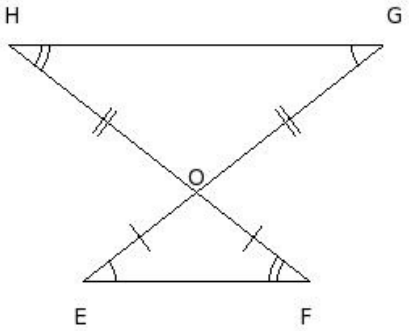
(i) SSS Congruency (ii) not congruent (iii) RHS Congruency (iv) SAS Congruency (v) ASA Congruency

44. With the data in the figure, △BOC ≅ △DOE by which property?



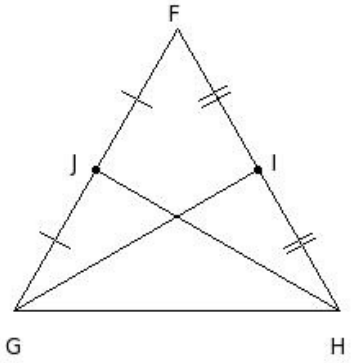
(i) SAS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) RHS Congruency

45. With the data in the figure, △EOF ≅ △GOH by which property?



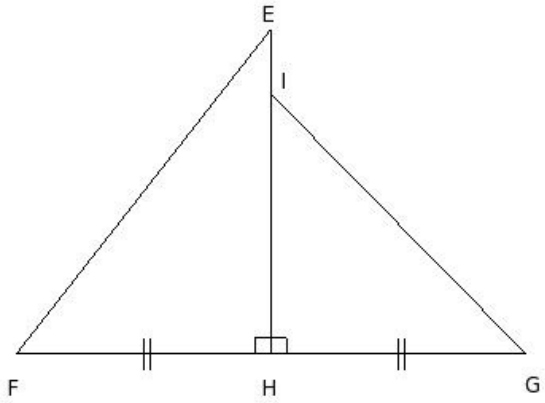
(i) SSS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) not congruent (v) RHS Congruency

46. With the data in the figure, △GHJ ≅ △HGI by which property?



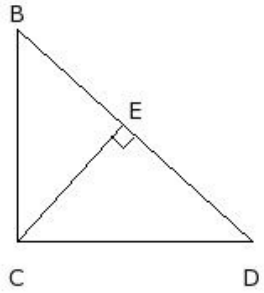
(i) ASA Congruency (ii) not congruent (iii) SSS Congruency (iv) SAS Congruency (v) RHS Congruency

47. With the data in the figure, △EFH ≅ △IGH by which property?



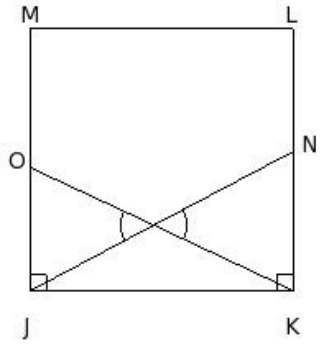
(i) SAS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) RHS Congruency (v) not congruent

48. With the data in the figure, △BCE ≅ △DCE by which property?



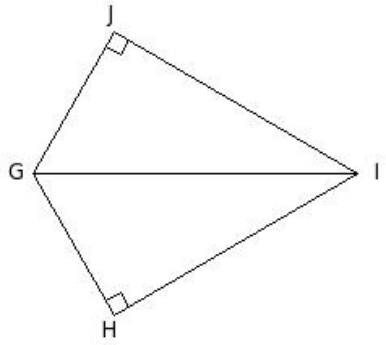
(i) SAS Congruency (ii) not congruent (iii) SSS Congruency (iv) RHS Congruency (v) ASA Congruency

49. With the data in the figure, △JKN ≅ △KJO by which property?



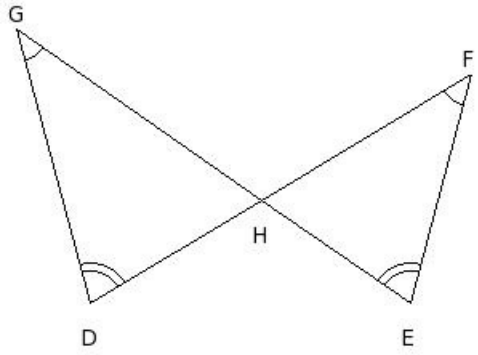
(i) not congruent (ii) RHS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) SSS Congruency

50. With the data in the figure, △GIJ ≅ △GIH by which property?



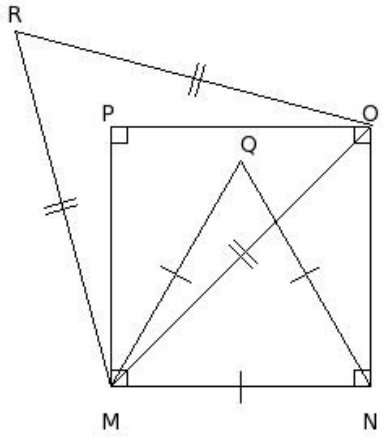
(i) ASA Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) SSS Congruency

51. With the data in the figure, △DHG ≅ △EHF by which property?



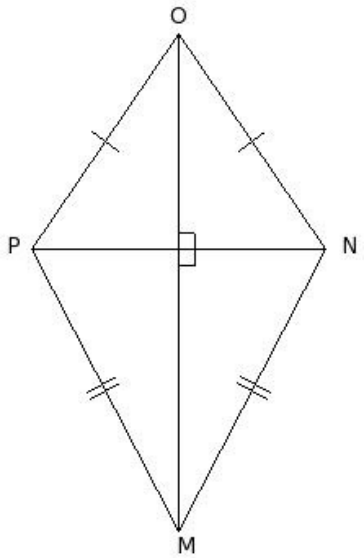
(i) ASA Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) SSS Congruency

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



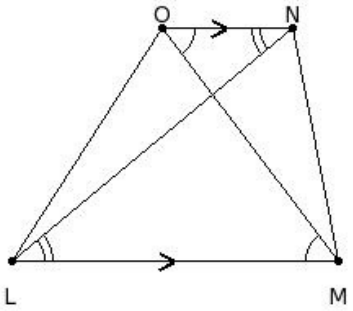
(i) not congruent (ii) SSS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) RHS Congruency

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



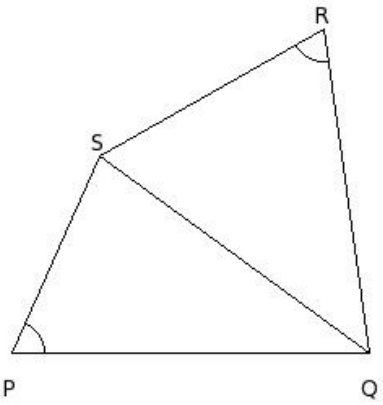
(i) SSS Congruency (ii) not congruent (iii) RHS Congruency (iv) ASA Congruency (v) SAS Congruency

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



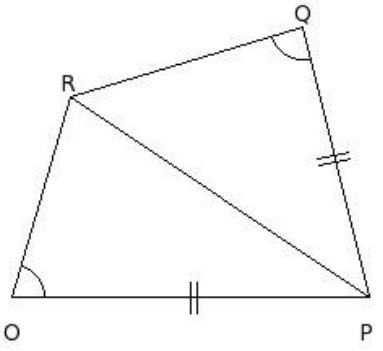
(i) RHS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) not congruent (v) SAS Congruency

55. With the data in the given figure, △PQS ≅ △RSQ by which property?



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

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



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

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

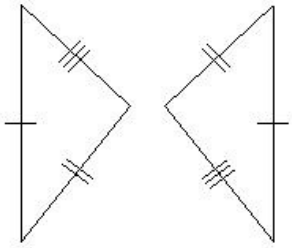


fig 3

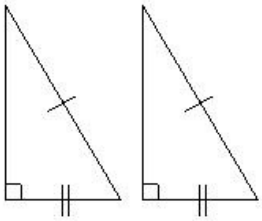


fig 4

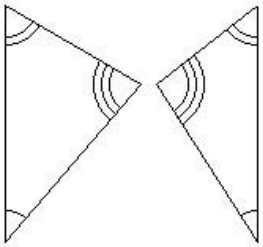


fig 1

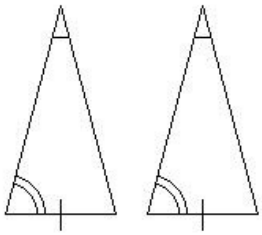


fig 2

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

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

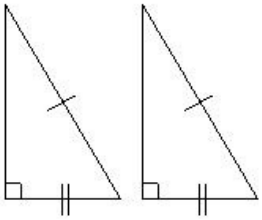


fig 3

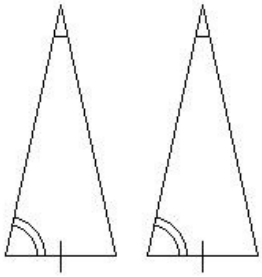


fig 4

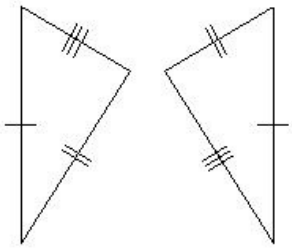


fig 1

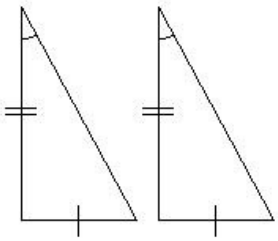


fig 2

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

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

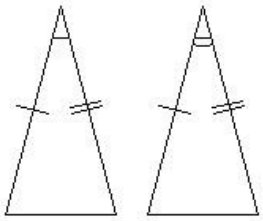


fig 3

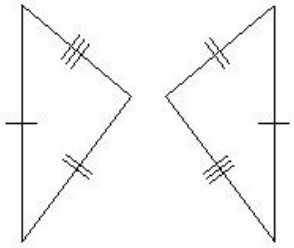


fig 4

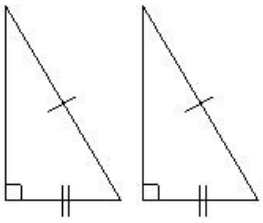


fig 1

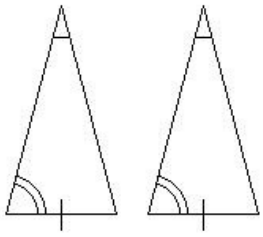


fig 2

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

Assignment Key

1) (iv)	2) (ii)	3) (i)	4) (i)	5) (iii)	6) (iv)
7) (iii)	8) (ii)	9) (ii)	10) (iii)	11) (v)	12) (ii)
13) (v)	14) (i)	15) (i)	16) (iii)	17) (iii)	18) (i)
19) (i)	20) (v)	21) (i)	22) (iv)	23) (i)	24) (ii)
25) (v)	26) (i)	27) (i)	28) (iii)	29) (iii)	30) (i)
31) (ii)	32) (i)	33) (iii)	34) (iv)	35) (iii)	36) (v)
37) (iii)	38) (iii)	39) (iii)	40) (i)	41) (ii)	42) (i)
43) (ii)	44) (ii)	45) (iv)	46) (ii)	47) (v)	48) (ii)
49) (i)	50) (iii)	51) (iii)	52) (i)	53) (ii)	54) (iv)
55) (iv)	56) (i)	57) (i)	58) (i)	59) (ii)	