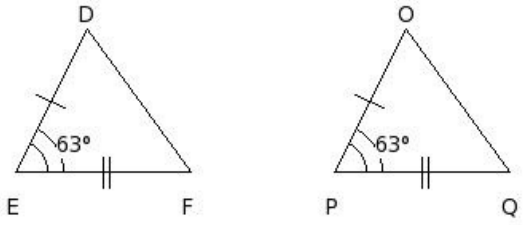
EduSahara™ Assignment

Name : Congruency of Triangles

Chapter : Congruency of Triangles

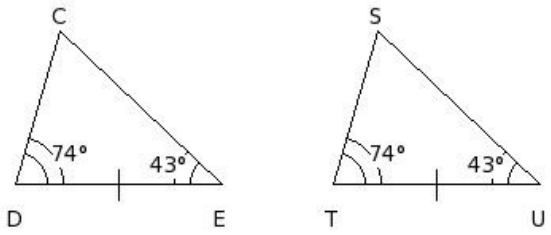
Grade : ICSE Grade VII

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



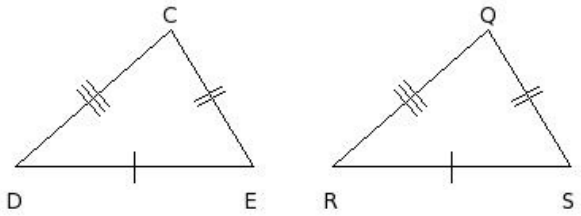
(i) SSS Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) ASA Congruency

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



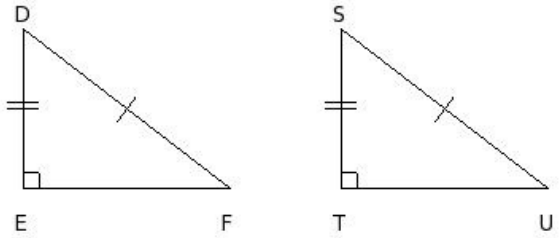
(i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) SSS Congruency

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



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

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



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

5. Which of the following are true?

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

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

6. Which of the following are true?

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

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

7. Which of the following are true?

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

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

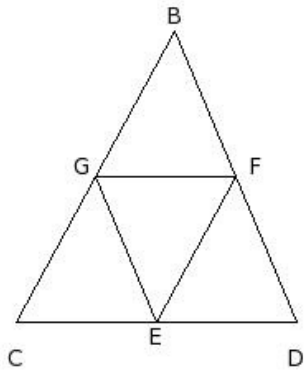
8. Which of the following are true?

a) Area of the union of two polygonal region is the sum of the individual area.
b) 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.
c) A polygonal region can be divided into a finite number of triangles in a unique way.
d) Area of the union of two polygonal region is not equal to the sum of the individual area.

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

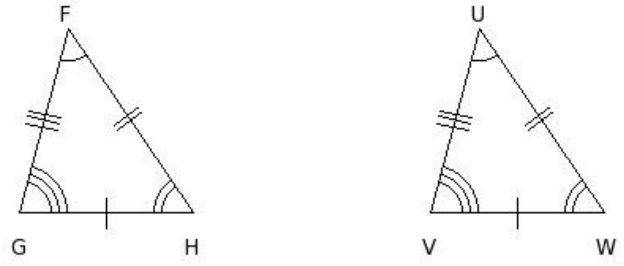
9. In the given figure, points E , F and G are the mid-points of sides CD, DB and BC of △BCD. Which of the following are true?

a) △GCE ≅ △EFG
b) △BGF ≅ △FED
c) △BGF ≅ △EGF
d) △BGF ≅ △EFG
e) △GCE ≅ △BGF



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

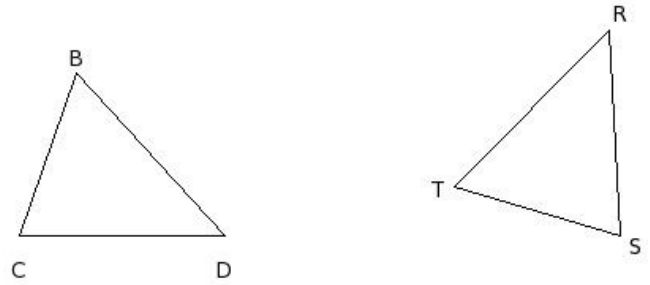
10. In the given figure, which of the following is true?



(i) △GHF ≅ △UVW (ii) △FGH ≅ △WUV (iii) △FGH ≅ △VWU (iv) △FGH ≅ △UVW (v) △FGH ≅ △WVU

11. In the given figure, △BCD ≅ △TSR. Which of the following are true?

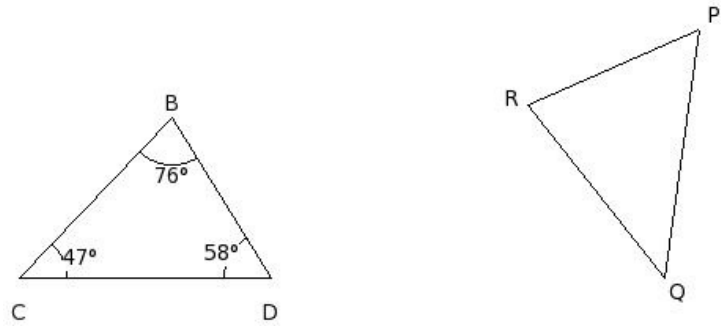
a) ∠C = ∠S
b) ∠B = ∠R
c) CD = SR
d) ∠D = ∠R
e) CD = TS



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

12. In the given figure, △BCD ≅ △RQP. Which of the following are true?

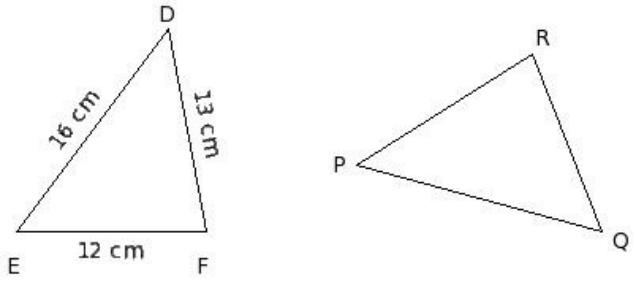
a) ∠P = 58°
b) ∠R = 47°
c) ∠Q = 47°
d) ∠Q = 58°
e) ∠R = 76°
f) ∠P = 76°



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

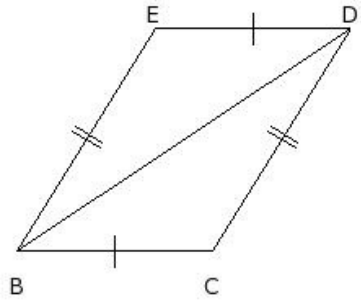
13. In the given figure, △DEF ≅ △PQR. Which of the following are true?

a) PQ = 16 cm
b) QR = 12 cm
c) PQ = 12 cm
d) RP = 16 cm
e) RP = 13 cm
f) QR = 16 cm



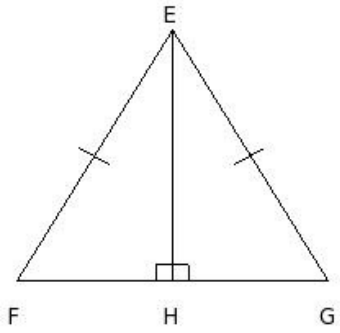
(i) {a,b,e} (ii) {f,c,e} (iii) {c,a} (iv) {d,b} (v) {d,a,b}

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



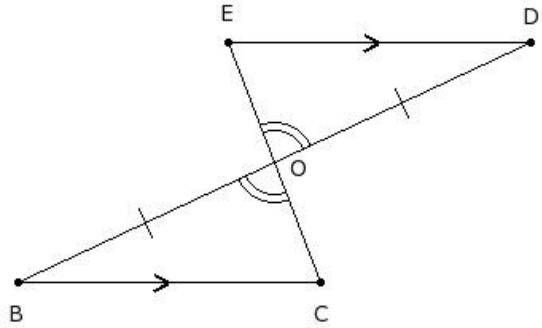
(i) △BED ≅ △CDB (ii) △BDE ≅ △DBC (iii) △BDE ≅ △BDC (iv) △BDE ≅ △BCD (v) △BED ≅ △BCD

15. With the data in the given figure, △EFH ≅ △EGH by which property?



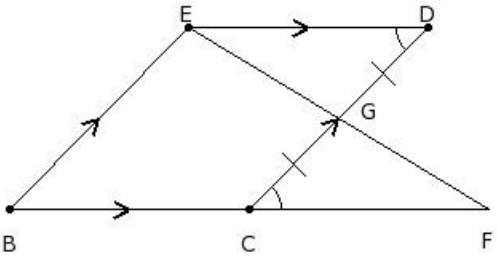
(i) not congruent (ii) ASA Congruency (iii) SAS Congruency (iv) RHS Congruency (v) SSS Congruency

16. With the data in the given figure, △OED ≅ △OCB by which property?



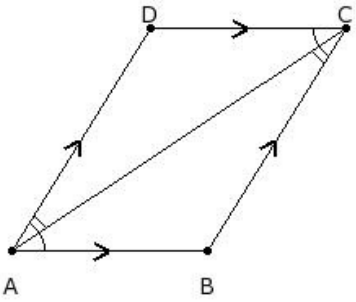
(i) SSS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) not congruent (v) SAS Congruency

17. With the given data in the figure, △EDG ≅ △FCG by which property?



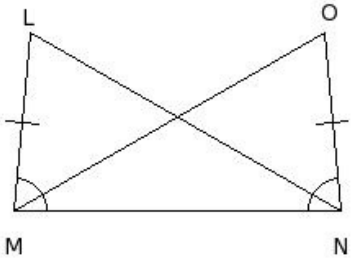
(i) ASA Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) RHS Congruency (v) not congruent

18. With the given data in the figure, △ABC ≅ △CDA by which property?



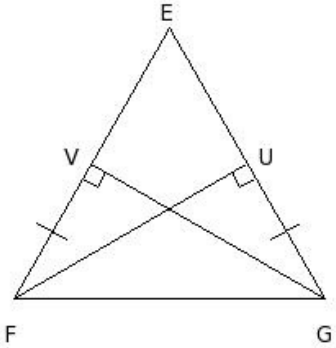
(i) not congruent (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency (v) ASA Congruency

19. With the given data in the figure, △LMN ≅ △ONM by which property?



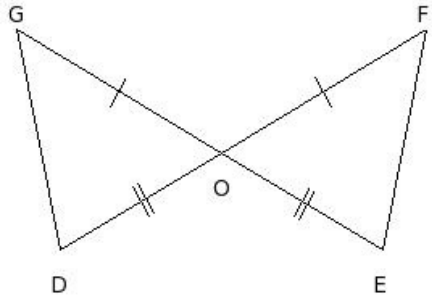
(i) ASA Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) RHS Congruency (v) not congruent

20. With the given data in the figure, △VFG ≅ △UGF by which property?



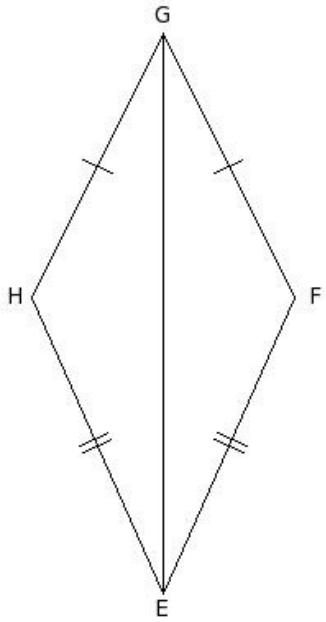
(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

21. With the data in the given figure, △DGO ≅ △EFO by which property?



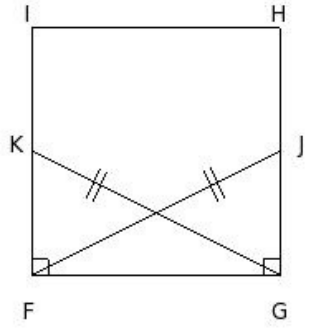
(i) not congruent (ii) ASA Congruency (iii) SSS Congruency (iv) RHS Congruency (v) SAS Congruency

22. With the data in the given figure, △EHG ≅ △EFG by which property?



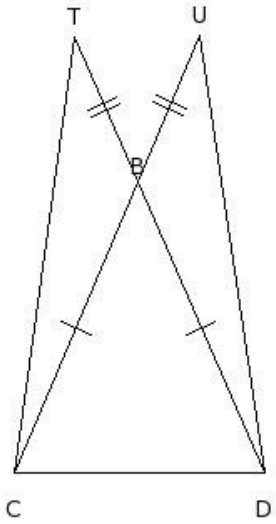
(i) not congruent (ii) ASA Congruency (iii) SSS Congruency (iv) RHS Congruency (v) SAS Congruency

23. With the data in the given figure, △KFG ≅ △JGF by which property?



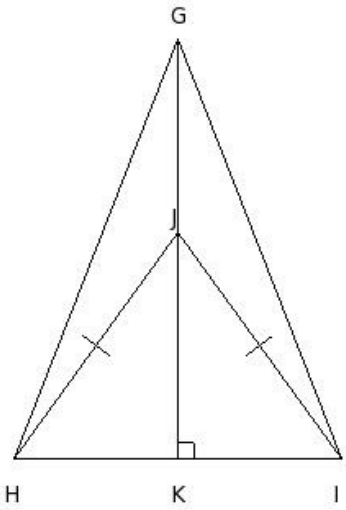
(i) not congruent (ii) RHS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) SAS Congruency

24. With the data in the given figure, △TCD ≅ △UDC by which property?



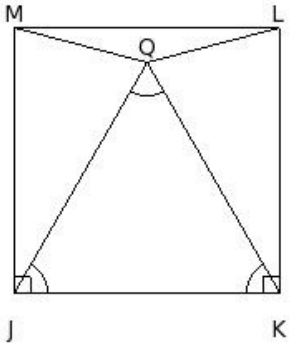
(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) SAS Congruency (v) ASA Congruency

25. In the given figure, △JHI is an isosceles triangle. GK ⊥ HI passing through J. △GJH ≅ △GJI by which property?



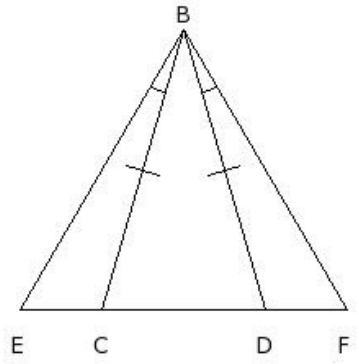
(i) RHS Congruency (ii) not congruent (iii) SAS Congruency (iv) ASA Congruency (v) SSS Congruency

26. In the given figure, JKLM is a square and △QJK is an equilateral triangle. △QMJ ≅ △QLK by which property?



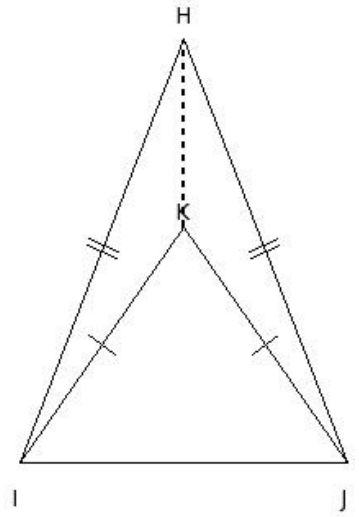
(i) not congruent (ii) RHS Congruency (iii) SSS Congruency (iv) SAS Congruency (v) ASA Congruency

27. With the data in the given figure, △BCE ≅ △BDF by which property?



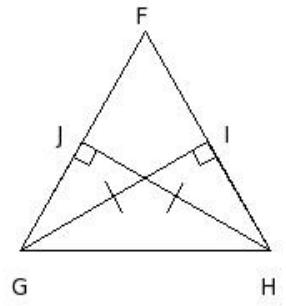
(i) SSS Congruency (ii) not congruent (iii) RHS Congruency (iv) ASA Congruency (v) SAS Congruency

28. With the data in the given figure, △HKI ≅ △HKJ by which property?



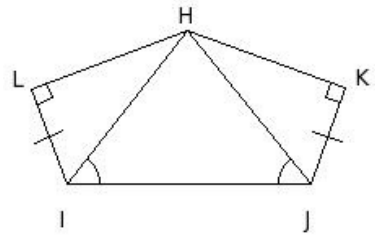
(i) ASA Congruency (ii) not congruent (iii) SSS Congruency (iv) RHS Congruency (v) SAS Congruency

29. With the data in the given figure, △GIH ≅ △HJG by which property?



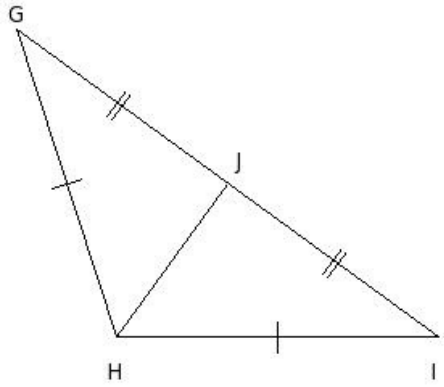
(i) RHS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) not congruent (v) SSS Congruency

30. With the data in the given figure, △HIL ≅ △HJK by which property?



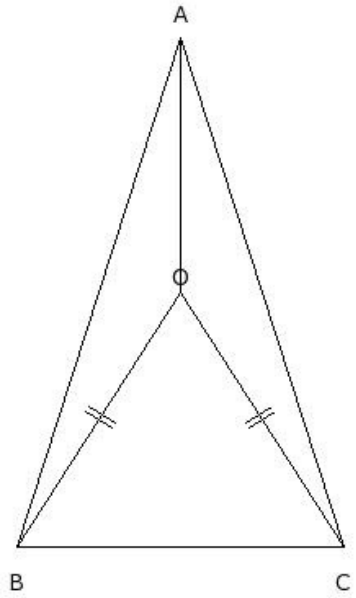
(i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) RHS Congruency

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



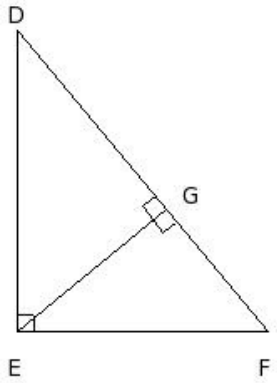
(i) not congruent (ii) ASA Congruency (iii) RHS Congruency (iv) SAS Congruency (v) SSS Congruency

32. With the data in the given figure, △AOB ≅ △AOC by which property?



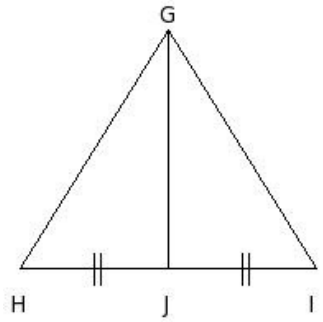
(i) RHS Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) ASA Congruency

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



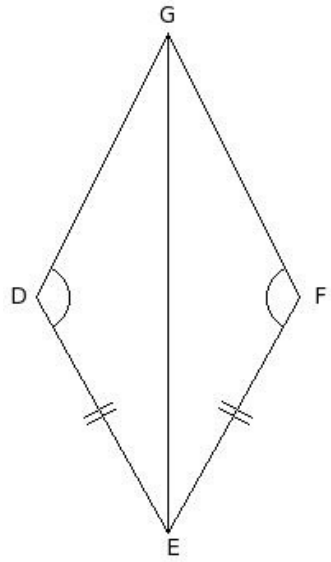
(i) SAS Congruency (ii) RHS Congruency (iii) not congruent (iv) ASA Congruency (v) SSS Congruency

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



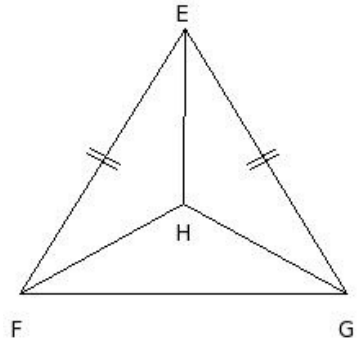
(i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) not congruent (v) SSS Congruency

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



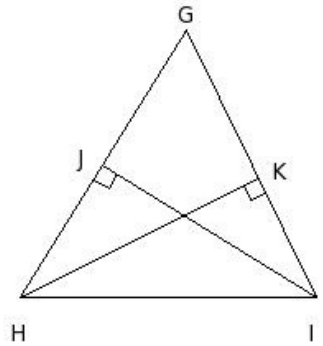
(i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) not congruent (v) SSS Congruency

36. With the data in the figure, △EFH ≅ △EGH by which property?



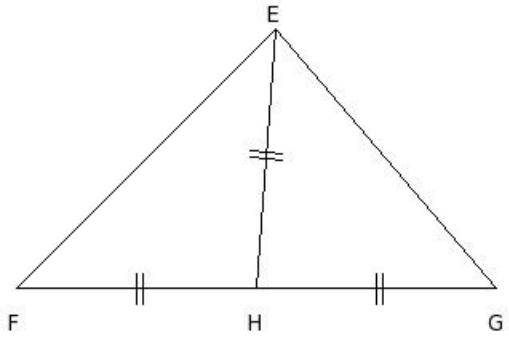
(i) ASA Congruency (ii) SSS Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency

37. With the data in the figure, △HKI ≅ △IJH by which property?



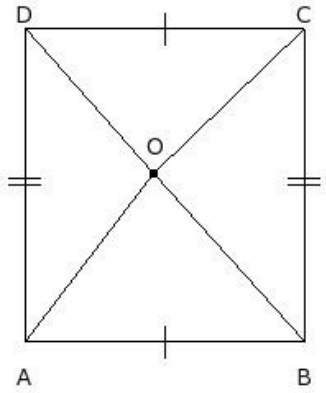
(i) ASA Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) RHS Congruency

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



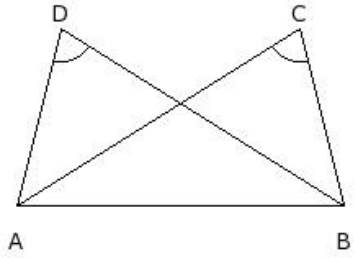
(i) SAS Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) not congruent (v) ASA Congruency

39. With the data in the figure, △AOB ≅ △DOC by which property?



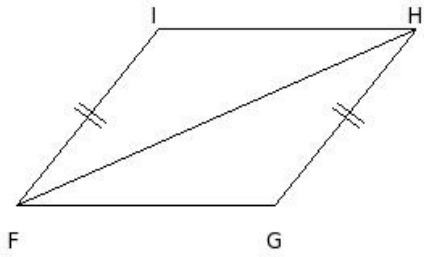
(i) SAS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) RHS Congruency (v) not congruent

40. With the data in the figure, △ABD ≅ △BAC by which property?



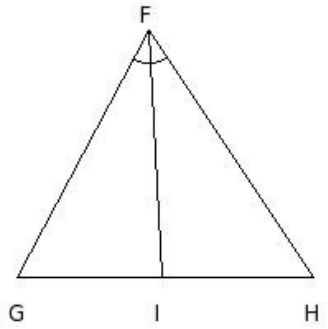
(i) RHS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) not congruent (v) SSS Congruency

41. With the data in the figure, △FHI ≅ △HFG by which property?



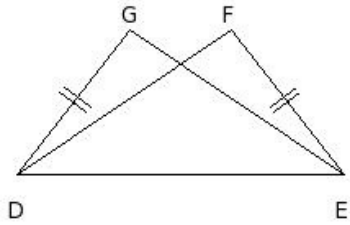
(i) RHS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) SAS Congruency (v) not congruent

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



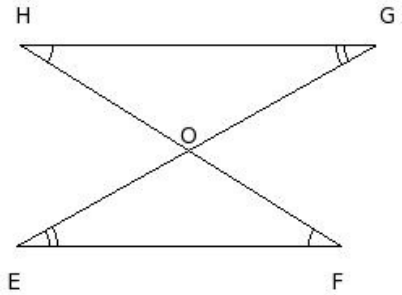
(i) RHS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) not congruent (v) SAS Congruency

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



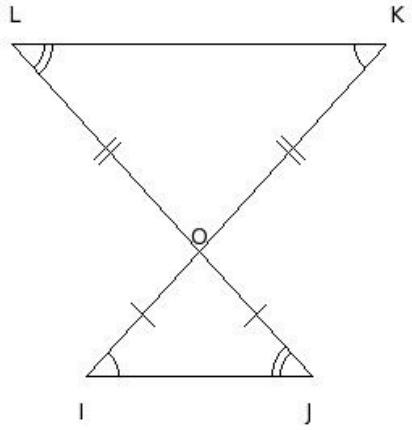
(i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) RHS Congruency

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



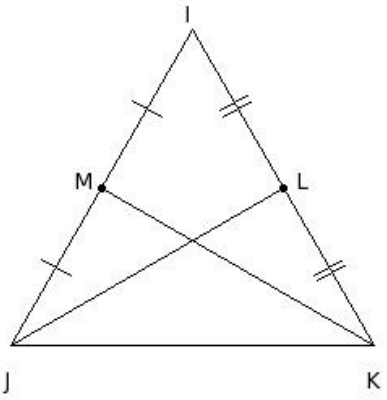
(i) SAS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) RHS Congruency (v) not congruent

45. With the data in the figure, △IOJ ≅ △KOL by which property?



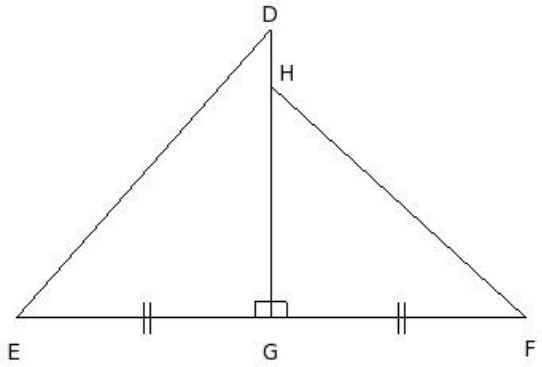
(i) ASA Congruency (ii) not congruent (iii) RHS Congruency (iv) SSS Congruency (v) SAS Congruency

46. With the data in the figure, △JKM ≅ △KJL by which property?



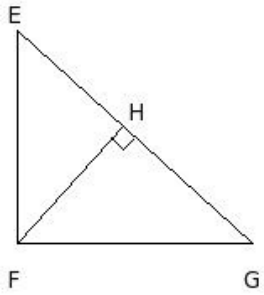
(i) RHS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) SAS Congruency (v) not congruent

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



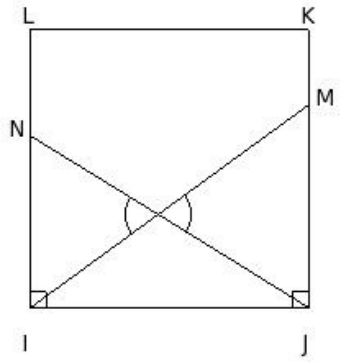
(i) SAS Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) not congruent (v) ASA Congruency

48. With the data in the figure, △EFH ≅ △GFH by which property?



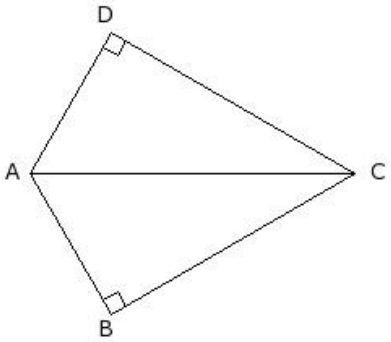
(i) ASA Congruency (ii) not congruent (iii) RHS Congruency (iv) SAS Congruency (v) SSS Congruency

49. With the data in the figure, △IJM ≅ △JIN by which property?



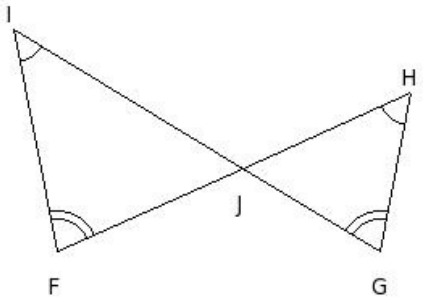
(i) SSS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) not congruent (v) SAS Congruency

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



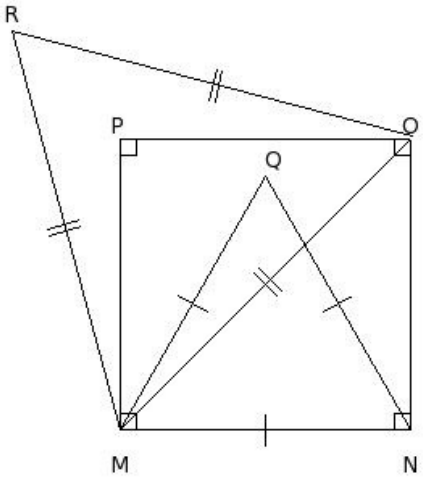
(i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) SAS Congruency

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



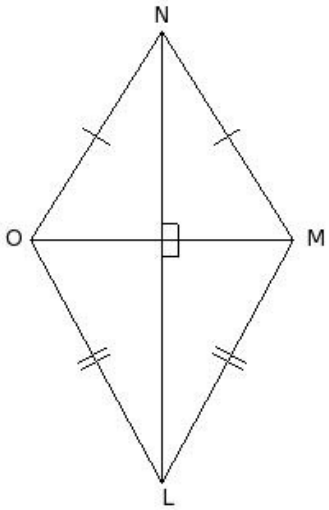
(i) ASA Congruency (ii) RHS Congruency (iii) not congruent (iv) SSS Congruency (v) SAS Congruency

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



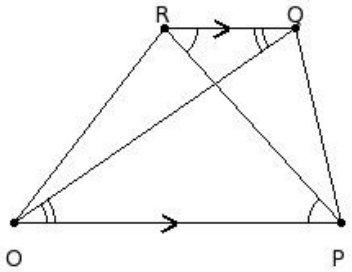
(i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) SSS Congruency (v) not congruent

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



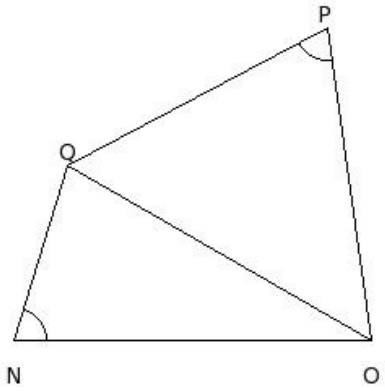
(i) SSS Congruency (ii) SAS Congruency (iii) not congruent (iv) RHS Congruency (v) ASA Congruency

54. With the data in the given figure, △OPR ≅ △POQ by which property?



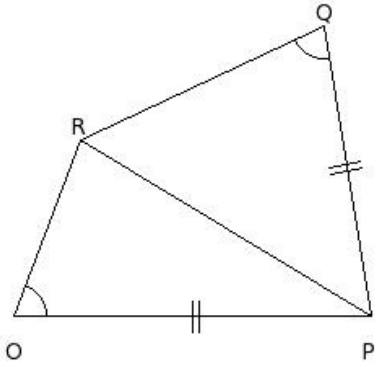
(i) RHS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) not congruent (v) SAS Congruency

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



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

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



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

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

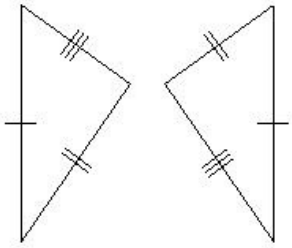


fig 3

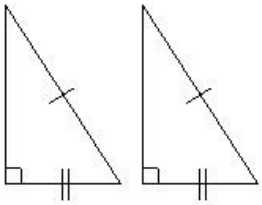


fig 4

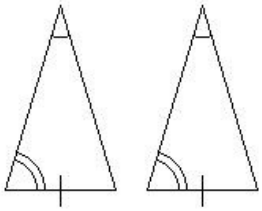


fig 1

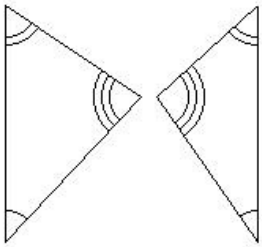


fig 2

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

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

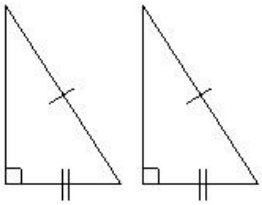


fig 3

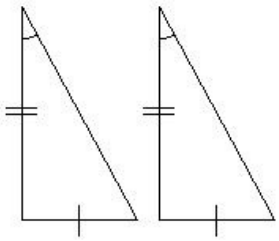


fig 4

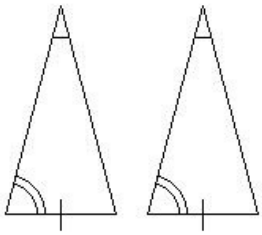


fig 1

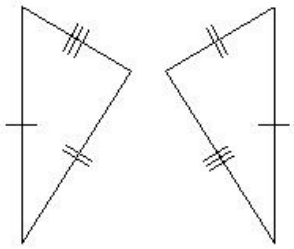


fig 2

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

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

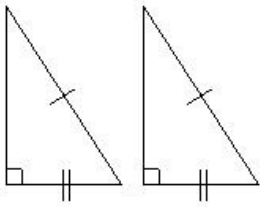


fig 3

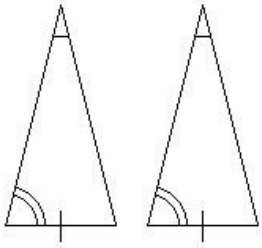


fig 4

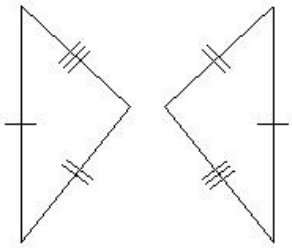


fig 1

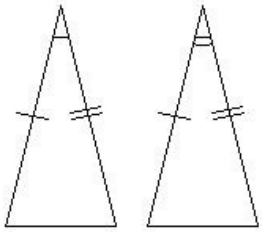


fig 2

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

Assignment Key

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