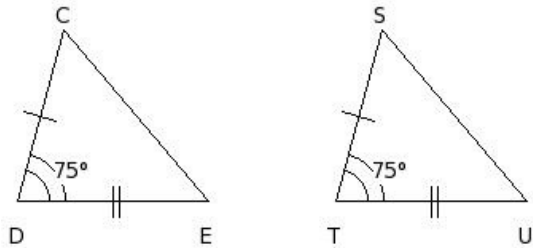


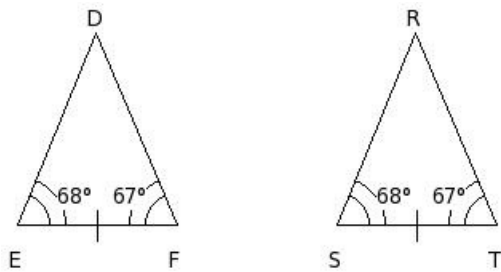


1. Identify the property by which the two given triangles are congruent



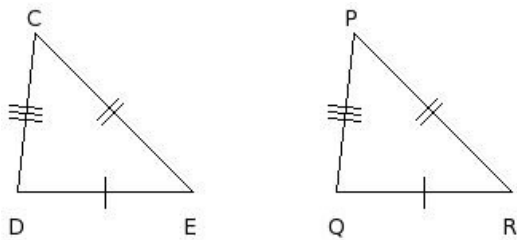
- (i) SAS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) SSS Congruency

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



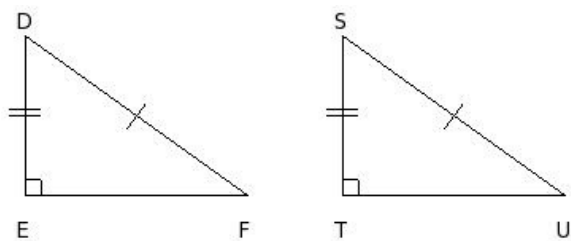
- (i) SAS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SSS Congruency

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



- (i) ASA Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) RHS 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 circles are congruent.
- b) Any two squares are congruent.
- c) Any two squares are similar.
- d) Any two circles are similar.
- e) Any two triangles are similar.
- f) Any two triangles are congruent.

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

6. Which of the following are true?

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

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

7. Which of the following are true?

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

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

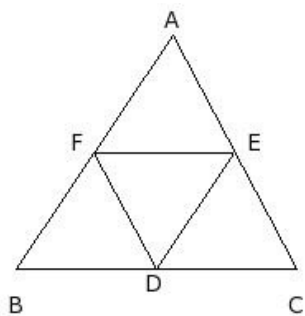
8. Which of the following are true?

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

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

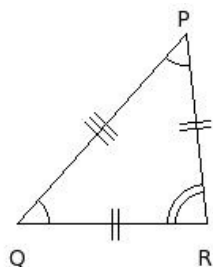
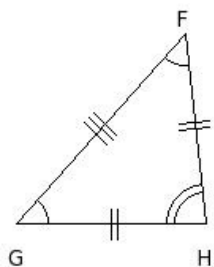
9. In the given figure, points D , E and F are the mid-points of sides BC , CA and AB of $\triangle ABC$. Which of the following are true?

- a) $\triangle AFE \cong \triangle EDC$
- b) $\triangle AFE \cong \triangle DFE$
- c) $\triangle AFE \cong \triangle DEF$
- d) $\triangle FBD \cong \triangle DEF$
- e) $\triangle FBD \cong \triangle AFE$



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

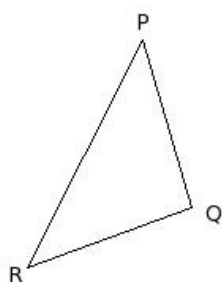
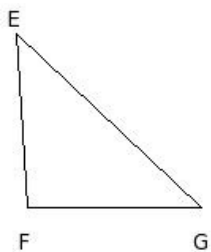
10. In the given figure, which of the following is true?



- (i) $\triangle FGH \cong \triangle PQR$ (ii) $\triangle FGH \cong \triangle RQP$ (iii) $\triangle FGH \cong \triangle QRP$ (iv) $\triangle GHF \cong \triangle PQR$ (v) $\triangle FGH \cong \triangle RPQ$

11. In the given figure, $\triangle EFG \cong \triangle RQP$. Which of the following are true?

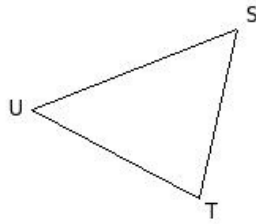
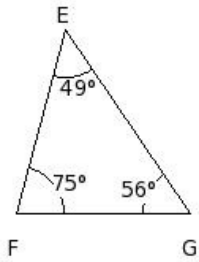
- a) $\angle F = \angle Q$
- b) $\angle G = \angle P$
- c) $FG = QP$
- d) $\angle E = \angle P$
- e) $FG = RQ$



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

12. In the given figure, $\triangle EFG \cong \triangle UTS$. Which of the following are true?

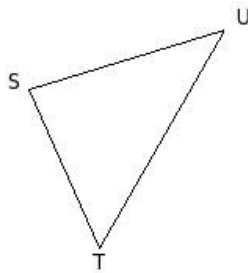
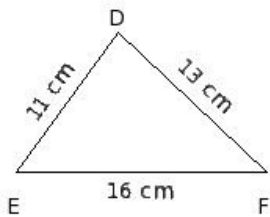
- a) $\angle S = 56^\circ$
- b) $\angle T = 56^\circ$
- c) $\angle T = 75^\circ$
- d) $\angle U = 75^\circ$
- e) $\angle U = 49^\circ$
- f) $\angle S = 49^\circ$



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

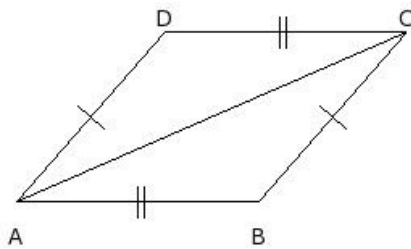
13. In the given figure, $\triangle DEF \cong \triangle STU$. Which of the following are true?

- a) $US = 13$ cm
- b) $ST = 16$ cm
- c) $ST = 11$ cm
- d) $US = 11$ cm
- e) $TU = 16$ cm
- f) $TU = 11$ cm



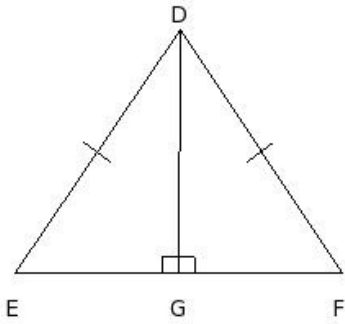
- (i) {a,c,e} (ii) {f,b,e} (iii) {b,a} (iv) {d,a,c} (v) {d,c}

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



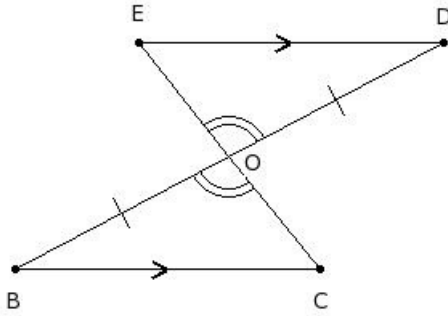
- (i) $\triangle ACD \cong \triangle CAB$ (ii) $\triangle ACD \cong \triangle ACB$ (iii) $\triangle ADC \cong \triangle BCA$ (iv) $\triangle ADC \cong \triangle ABC$ (v) $\triangle ACD \cong \triangle ABC$

15. With the data in the given figure, $\triangle DEG \cong \triangle DFG$ by which property?



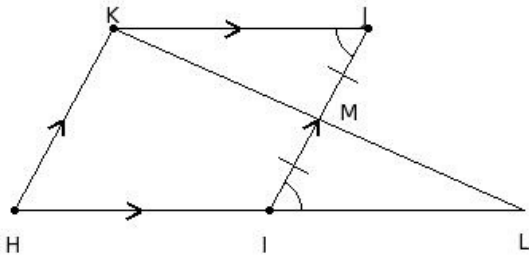
- (i) not congruent (ii) ASA Congruency (iii) RHS Congruency (iv) SAS Congruency (v) SSS Congruency

16. With the data in the given figure, $\triangle OED \cong \triangle OCB$ by which property?



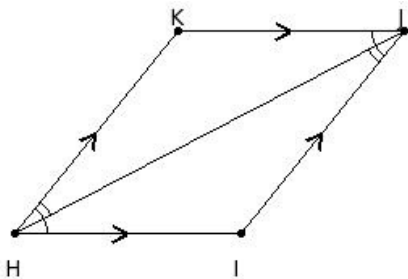
- (i) not congruent (ii) RHS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) SAS Congruency

17. With the given data in the figure, $\triangle KJM \cong \triangle LIM$ by which property?



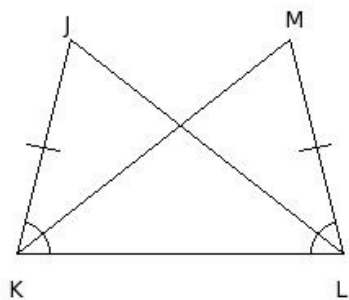
- (i) not congruent (ii) SSS Congruency (iii) RHS Congruency (iv) SAS Congruency (v) ASA Congruency

18. With the given data in the figure, $\triangle HIJ \cong \triangle JKH$ by which property?



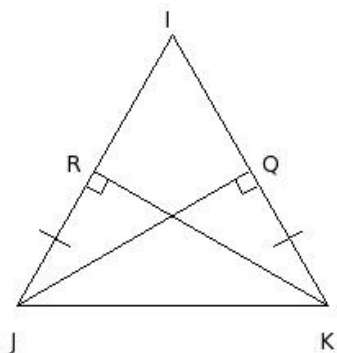
- (i) ASA Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) not congruent (v) SAS Congruency

19. With the given data in the figure, $\triangle JKL \cong \triangle MLK$ by which property?



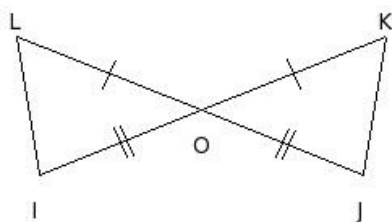
- (i) ASA Congruency (ii) not congruent (iii) SAS Congruency (iv) RHS Congruency (v) SSS Congruency

20. With the given data in the figure, $\triangle RJK \cong \triangle QKJ$ by which property?



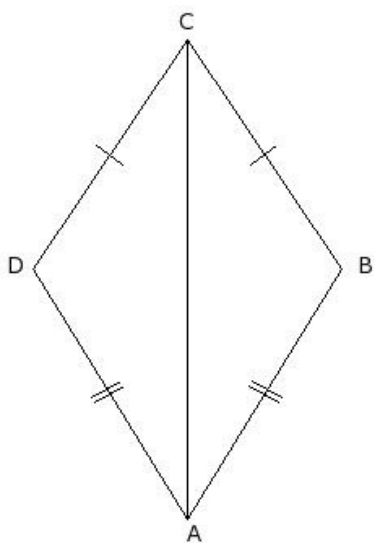
- (i) not congruent (ii) SAS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency

21. With the data in the given figure, $\triangle ILO \cong \triangle JKO$ by which property?



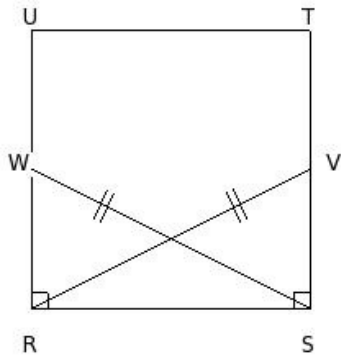
- (i) not congruent (ii) RHS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

22. With the data in the given figure, $\triangle ADC \cong \triangle ABC$ by which property?



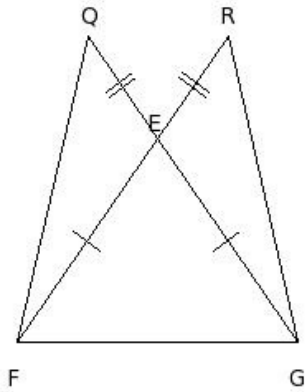
- (i) RHS Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) not congruent

23. With the data in the given figure, $\triangle WRS \cong \triangle VSR$ by which property?



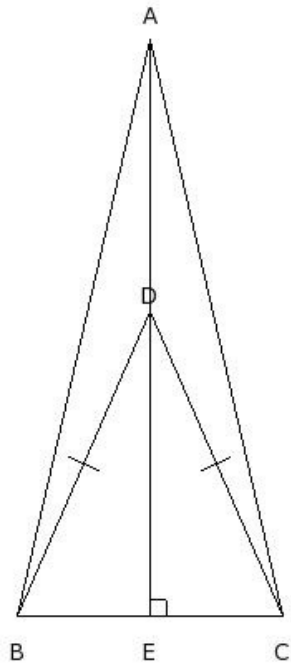
- (i) SAS Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) not congruent (v) ASA Congruency

24. With the data in the given figure, $\triangle QFG \cong \triangle RGF$ by which property?



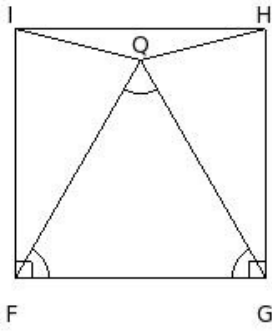
- (i) not congruent (ii) SAS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) SSS Congruency

25. In the given figure, $\triangle DBC$ is an isosceles triangle. $AE \perp BC$ passing through D. $\triangle ADB \cong \triangle ADC$ by which property?



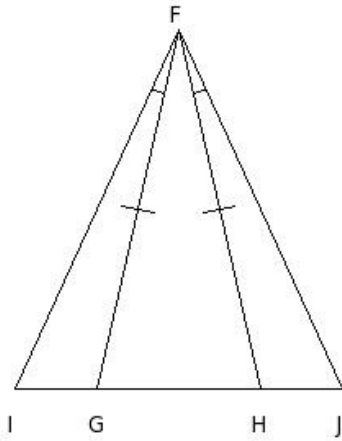
- (i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) SSS Congruency (v) not congruent

26. In the given figure, FGHI is a square and $\triangle QFG$ is an equilateral triangle. $\triangle QIF \cong \triangle QHG$ by which property?



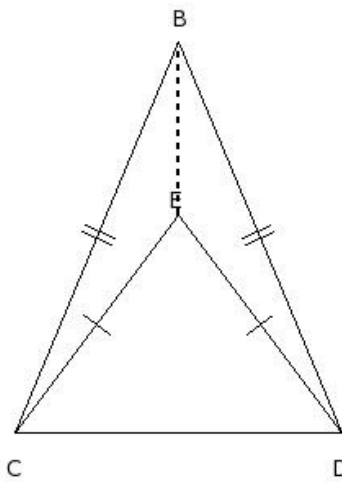
- (i) SSS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) RHS Congruency (v) not congruent

27. With the data in the given figure, $\triangle FGI \cong \triangle FHJ$ by which property?



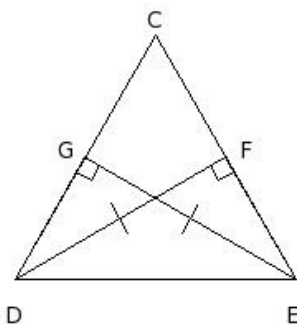
- (i) not congruent (ii) ASA Congruency (iii) RHS Congruency (iv) SSS Congruency (v) SAS Congruency

28. With the data in the given figure, $\triangle BEC \cong \triangle BED$ by which property?



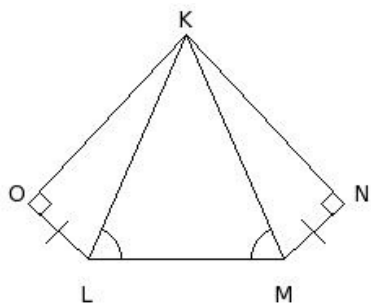
- (i) RHS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) not congruent (v) SSS Congruency

29. With the data in the given figure, $\triangle DFE \cong \triangle EGD$ by which property?



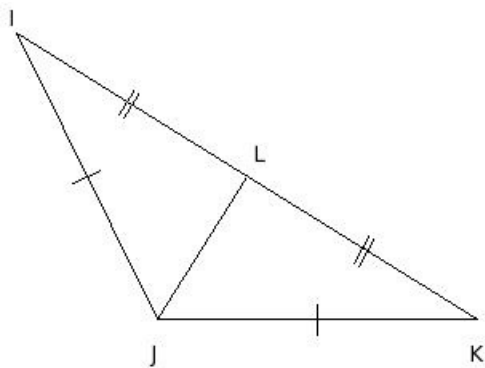
- (i) RHS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) SSS Congruency (v) not congruent

30. With the data in the given figure, $\triangle KLO \cong \triangle KMN$ by which property?



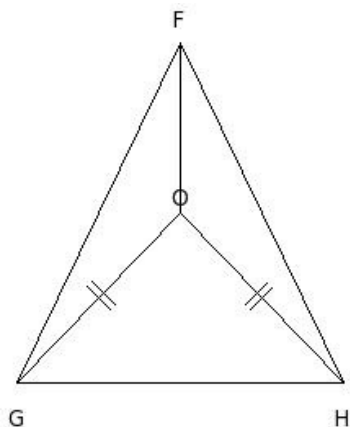
- (i) RHS Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) not congruent

31. In the given figure, $\triangle IJK$ is an obtuse angled triangle. $\triangle IJL \cong \triangle KJL$ by which property?



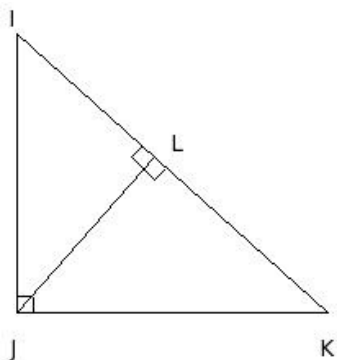
- (i) RHS Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) ASA Congruency

32. With the data in the given figure, $\triangle FOG \cong \triangle FOH$ by which property?



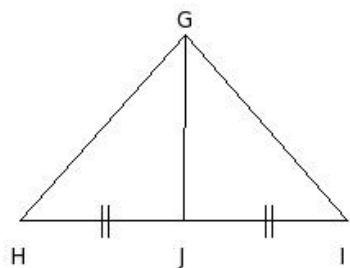
- (i) SSS Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) ASA Congruency

33. With the data in the figure, $\triangle ILJ \cong \triangle KLJ$ by which property?



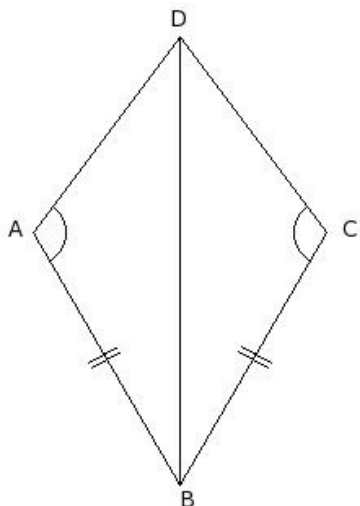
- (i) ASA Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) SSS Congruency

34. With the data in the figure, $\triangle GJH \cong \triangle GJI$ by which property?



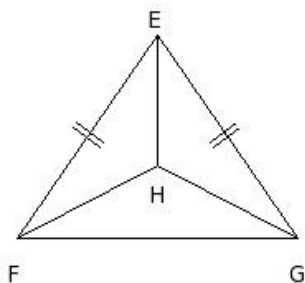
- (i) not congruent (ii) ASA Congruency (iii) SAS Congruency (iv) SSS Congruency (v) RHS Congruency

35. With the data in the figure, $\triangle ADB \cong \triangle CDB$ by which property?



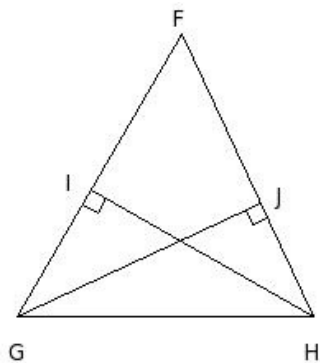
- (i) ASA Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) RHS Congruency (v) not congruent

36. With the data in the figure, $\triangle EFH \cong \triangle EGH$ by which property?



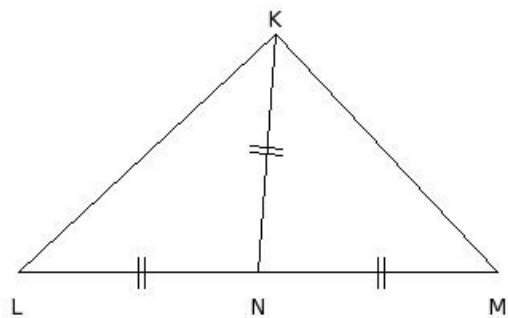
- (i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) SSS Congruency (v) not congruent

37. With the data in the figure, $\triangle GJH \cong \triangle HIG$ by which property?



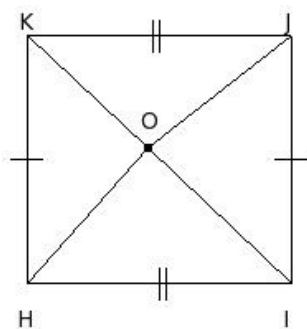
- (i) not congruent (ii) RHS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) SSS Congruency

38. With the data in the figure, $\triangle KNL \cong \triangle KNM$ by which property?



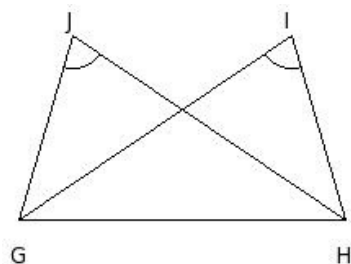
- (i) SSS Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) not congruent (v) ASA Congruency

39. With the data in the figure, $\triangle HOI \cong \triangle KOJ$ by which property?



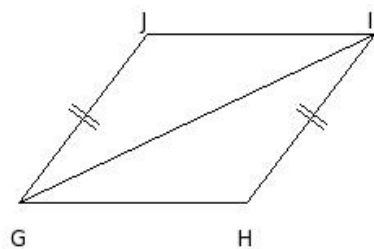
- (i) RHS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) not congruent (v) SAS Congruency

40. With the data in the figure, $\triangle GHJ \cong \triangle HGI$ by which property?



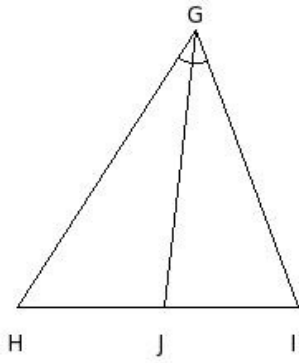
- (i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) not congruent (v) SSS Congruency

41. With the data in the figure, $\triangle GIJ \cong \triangle IGH$ by which property?



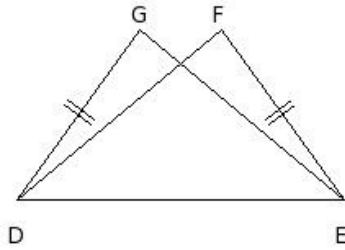
- (i) ASA Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) SAS Congruency (v) not congruent

42. With the data in the figure, $\triangle GJH \cong \triangle GJI$ by which property?



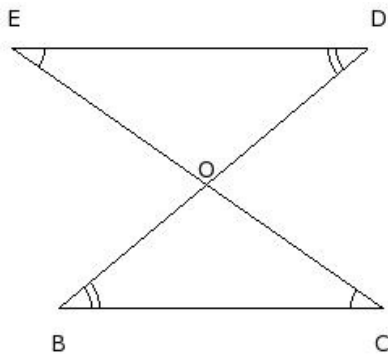
- (i) SSS Congruency (ii) ASA Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency

43. With the data in the figure, $\triangle DGE \cong \triangle EFD$ by which property?



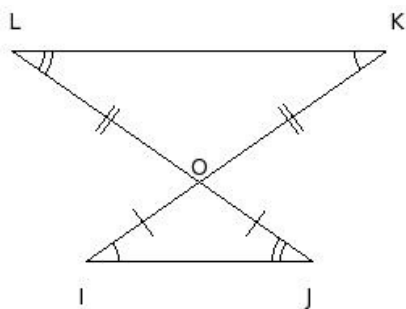
- (i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) SSS Congruency (v) not congruent

44. With the data in the figure, $\triangle BOC \cong \triangle DOE$ by which property?



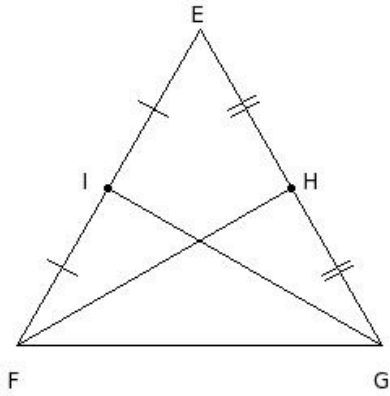
- (i) SSS Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) ASA Congruency

45. With the data in the figure, $\triangle IOJ \cong \triangle KOL$ by which property?



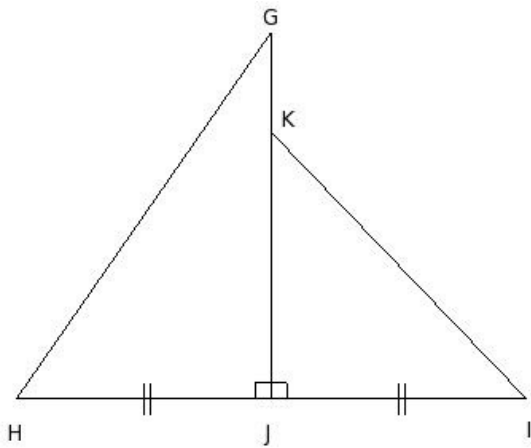
- (i) SSS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) not congruent

46. With the data in the figure, $\triangle FGI \cong \triangle GFH$ by which property?



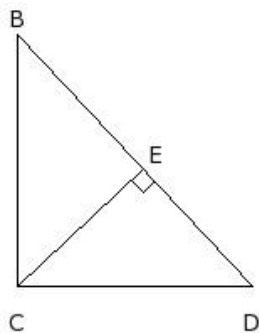
- (i) RHS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) not congruent (v) SSS Congruency

47. With the data in the figure, $\triangle GHJ \cong \triangle KIJ$ by which property?



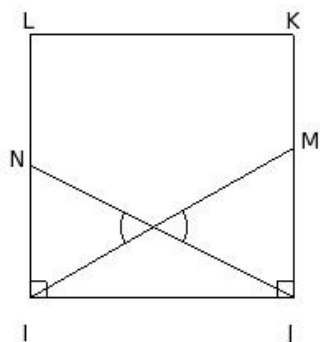
- (i) SSS Congruency (ii) not congruent (iii) RHS Congruency (iv) ASA Congruency (v) SAS Congruency

48. With the data in the figure, $\triangle BCE \cong \triangle DCE$ by which property?



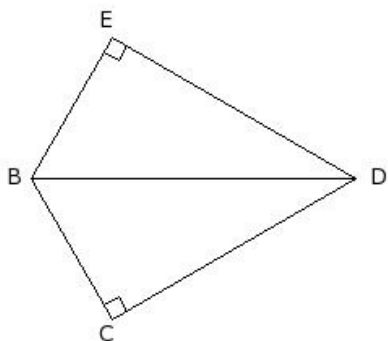
- (i) RHS Congruency (ii) SSS Congruency (iii) not congruent (iv) ASA Congruency (v) SAS Congruency

49. With the data in the figure, $\triangle IJM \cong \triangle JIN$ by which property?



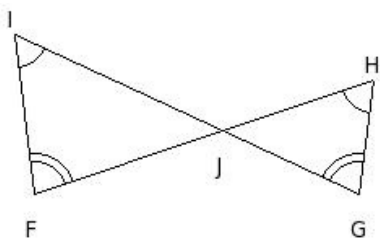
- (i) RHS Congruency (ii) not congruent (iii) SAS Congruency (iv) ASA Congruency (v) SSS Congruency

50. With the data in the figure, $\triangle BDE \cong \triangle BDC$ by which property?



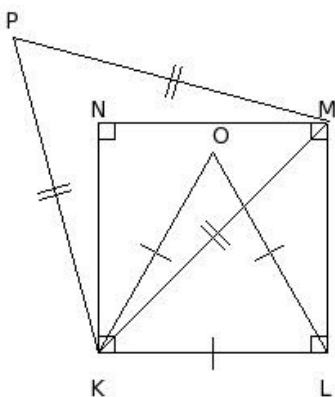
- (i) SSS Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) not congruent (v) ASA Congruency

51. With the data in the figure, $\triangle FJI \cong \triangle GJH$ by which property?



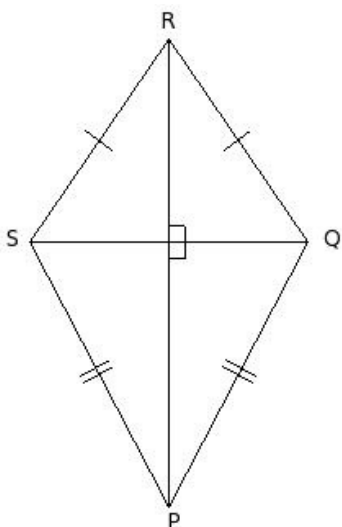
- (i) not congruent (ii) RHS Congruency (iii) SSS Congruency (iv) SAS Congruency (v) ASA Congruency

52. With the data in the figure, $\triangle KLO \cong \triangle KMP$ by which property?



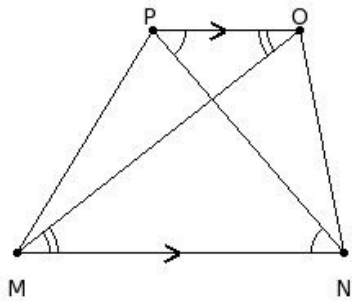
- (i) RHS Congruency (ii) not congruent (iii) SAS Congruency (iv) SSS Congruency (v) ASA Congruency

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



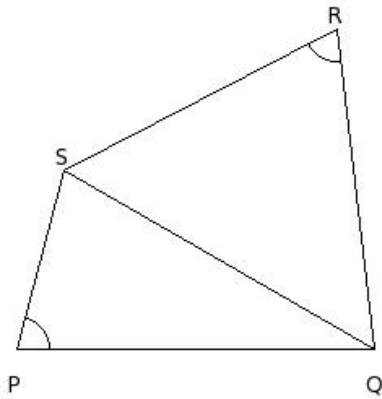
- (i) SAS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) RHS Congruency

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



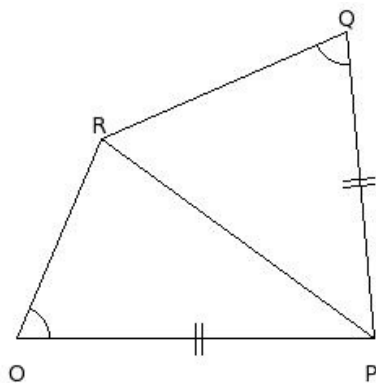
- (i) not congruent (ii) SAS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) SSS Congruency

55. With the data in the given figure, $\triangle PQS \cong \triangle RSQ$ by which property?



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

56. With the data in the given figure, $\triangle OPR \cong \triangle QPR$ by which property?



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

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

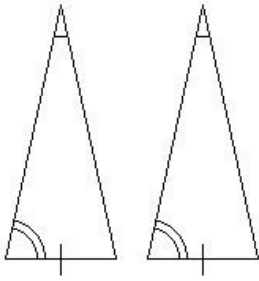


fig 3

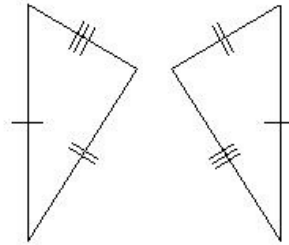


fig 4

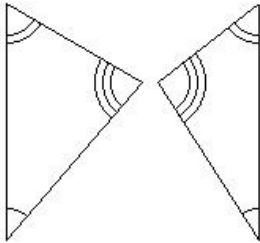


fig 1

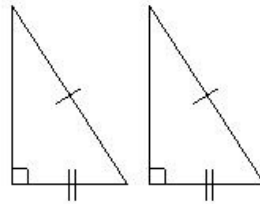


fig 2

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

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

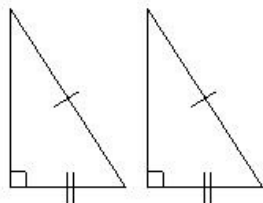


fig 3

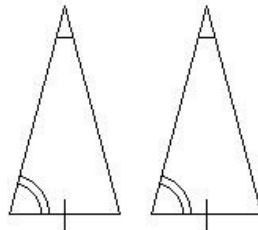


fig 4

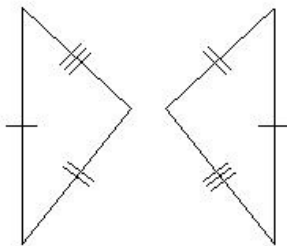


fig 1

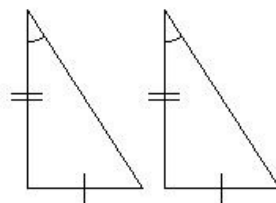


fig 2

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

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

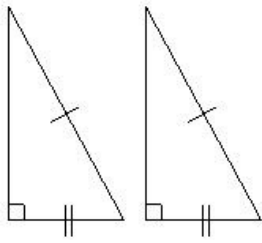


fig 3

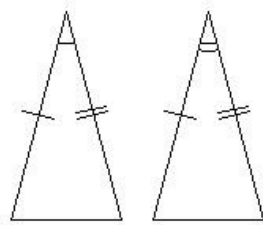


fig 4

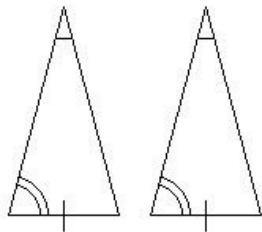


fig 1

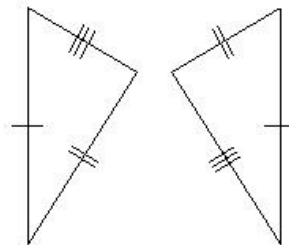


fig 2

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

Assignment Key

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