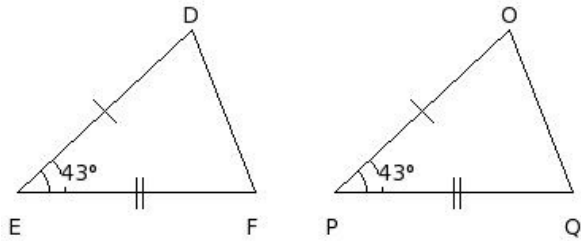


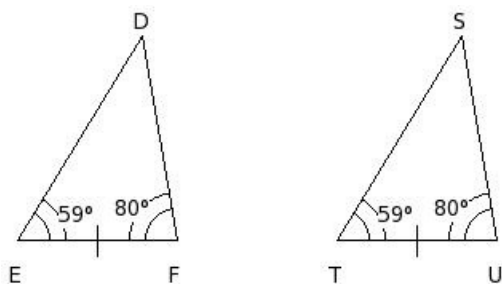


1. Identify the property by which the two given triangles are congruent



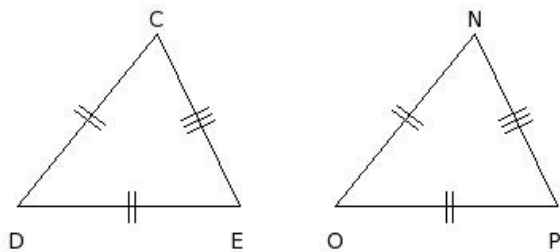
- (i) SAS Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) ASA Congruency

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



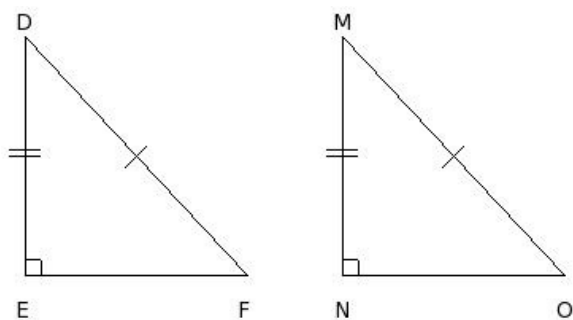
- (i) SSS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) RHS Congruency

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



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

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



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

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

6. Which of the following are true?

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

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

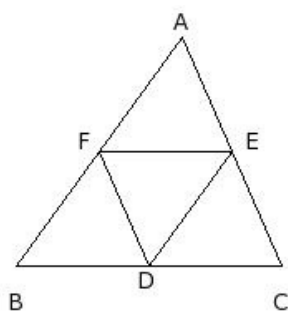
7. Which of the following are true?

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

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

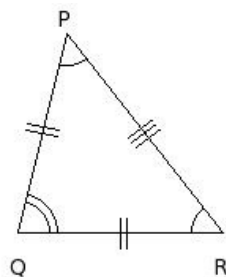
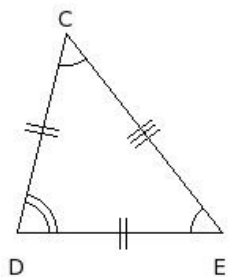
8. In the given figure, points D, E and F are the mid-points of sides BC, CA and AB of  $\triangle ABC$ . Which of the following are true?

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



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

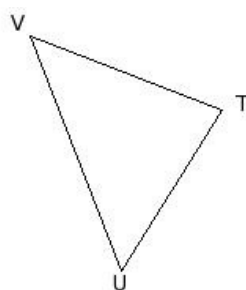
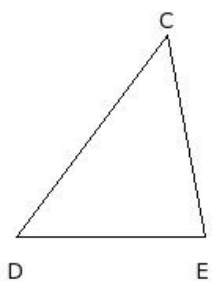
9. In the given figure, which of the following is true?



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

10. In the given figure,  $\triangle CDE \cong \triangle VUT$ . Which of the following are true?

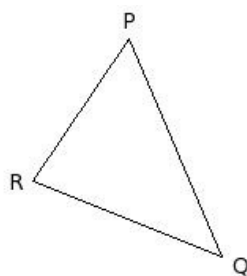
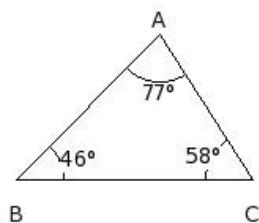
- a)  $\angle E = \angle T$   
 b)  $\angle D = \angle U$   
 c)  $DE = VU$   
 d)  $DE = UT$   
 e)  $\angle C = \angle T$



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

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

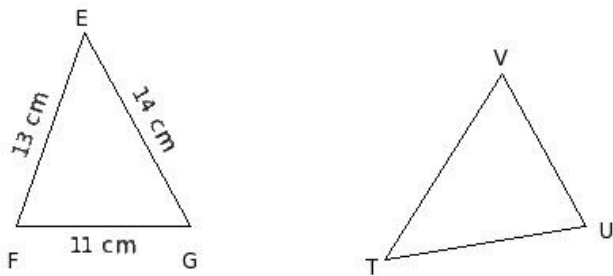
- a)  $\angle Q = 46^\circ$   
 b)  $\angle R = 77^\circ$   
 c)  $\angle P = 58^\circ$   
 d)  $\angle Q = 58^\circ$   
 e)  $\angle P = 77^\circ$   
 f)  $\angle R = 46^\circ$



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

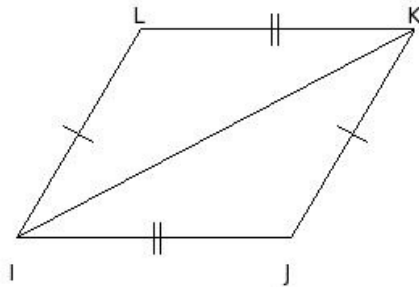
12. In the given figure,  $\triangle EFG \cong \triangle TUV$ . Which of the following are true?

- a)  $TU = 13$  cm
- b)  $VT = 14$  cm
- c)  $UV = 13$  cm
- d)  $TU = 11$  cm
- e)  $UV = 11$  cm
- f)  $VT = 13$  cm



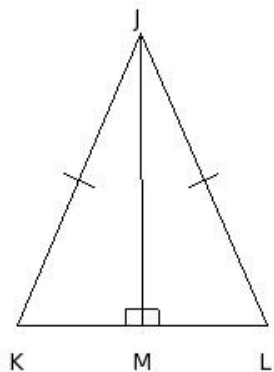
- (i) {f,c,e} (ii) {a,b,e} (iii) {d,b} (iv) {d,a,b} (v) {c,a}

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



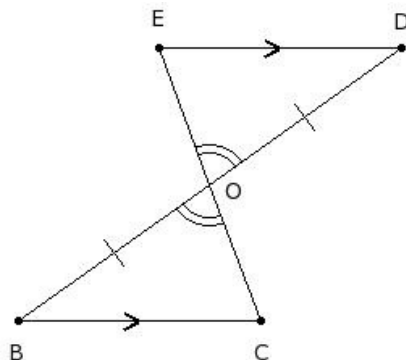
- (i)  $\triangle IKL \cong \triangle KIJ$  (ii)  $\triangle IKL \cong \triangle IJK$  (iii)  $\triangle ILK \cong \triangle IJK$  (iv)  $\triangle IKL \cong \triangle IKJ$  (v)  $\triangle ILK \cong \triangle JKI$

14. With the data in the given figure,  $\triangle JKM \cong \triangle JLM$  by which property?



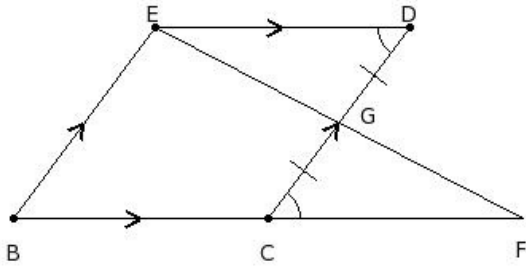
- (i) SSS Congruency (ii) not congruent (iii) RHS Congruency (iv) SAS Congruency (v) ASA Congruency

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



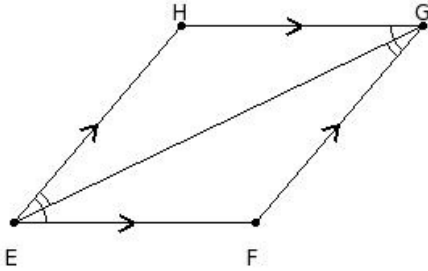
- (i) SSS Congruency (ii) ASA Congruency (iii) not congruent (iv) RHS Congruency (v) SAS Congruency

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



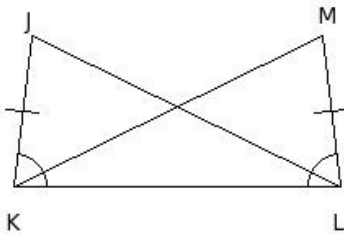
- (i) ASA Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) RHS Congruency

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



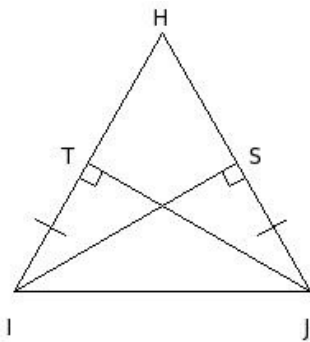
- (i) RHS Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) ASA Congruency

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



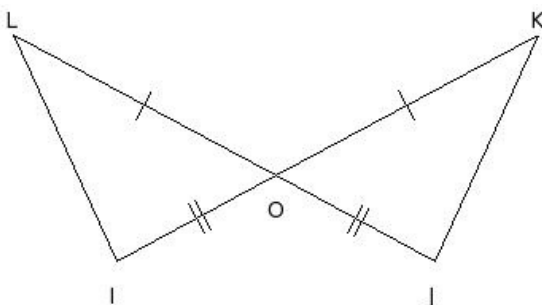
- (i) not congruent (ii) SSS Congruency (iii) ASA Congruency (iv) RHS Congruency (v) SAS Congruency

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



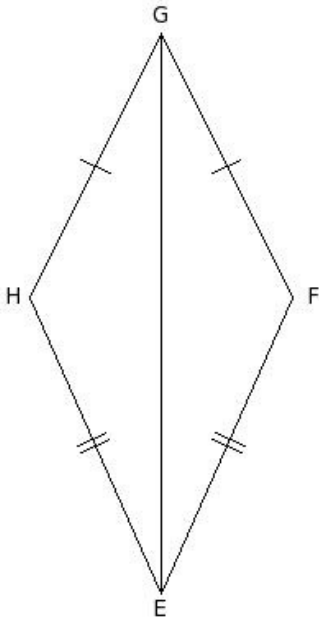
- (i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

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



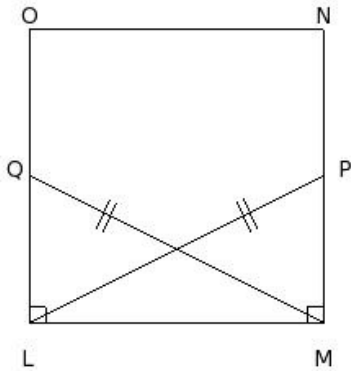
- (i) not congruent (ii) ASA Congruency (iii) SAS Congruency (iv) SSS Congruency (v) RHS Congruency

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



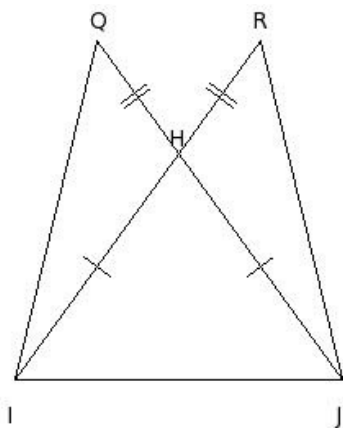
- (i) SAS Congruency (ii) not congruent (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency

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



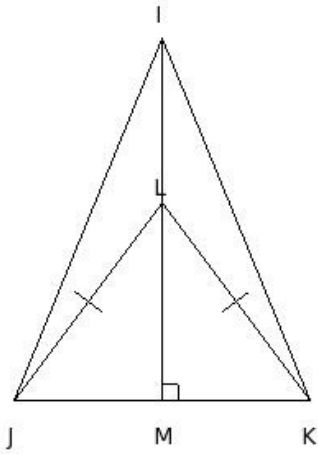
- (i) RHS Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) ASA Congruency

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



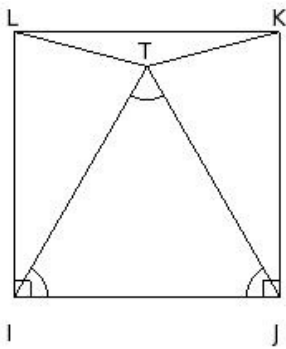
- (i) RHS Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) not congruent (v) ASA Congruency

24. In the given figure,  $\triangle IJK$  is an isosceles triangle.  $IM \perp JK$  passing through  $L$ .  $\triangle ILJ \cong \triangle ILK$  by which property?



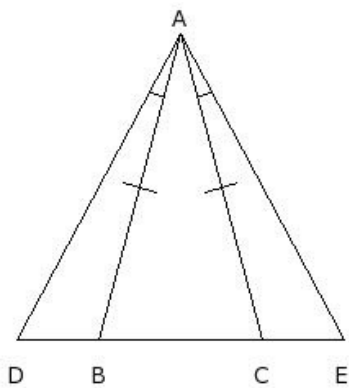
- (i) RHS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) not congruent

25. In the given figure,  $IJKL$  is a square and  $\triangle TIJ$  is an equilateral triangle.  $\triangle TLI \cong \triangle TKJ$  by which property?



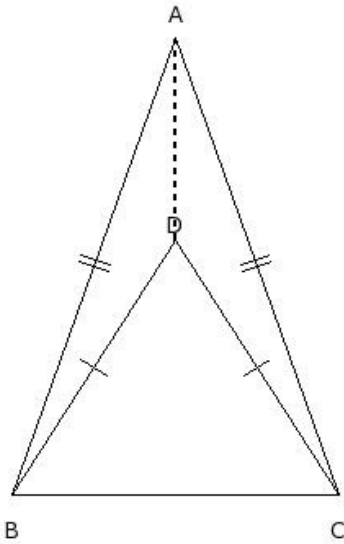
- (i) ASA Congruency (ii) not congruent (iii) RHS Congruency (iv) SSS Congruency (v) SAS Congruency

26. With the data in the given figure,  $\triangle ABD \cong \triangle ACE$  by which property?



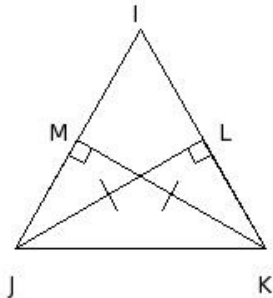
- (i) RHS Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) not congruent

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



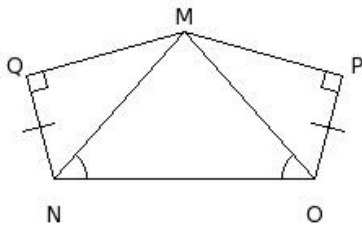
- (i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency (v) not congruent

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



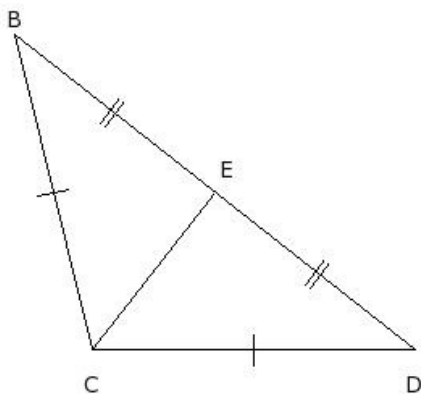
- (i) RHS Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) not congruent (v) ASA Congruency

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



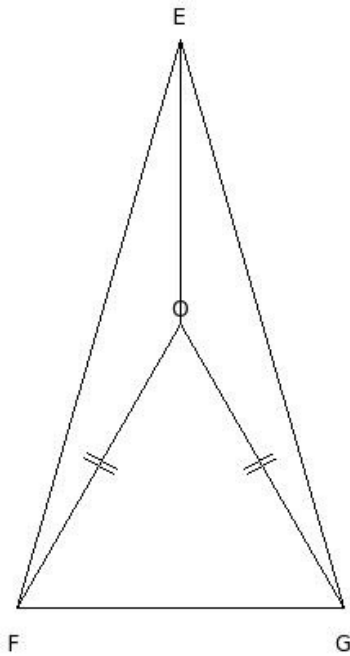
- (i) ASA Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) SAS Congruency (v) not congruent

30. In the given figure,  $\triangle BCD$  is an obtuse angled triangle.  $\triangle BCE \cong \triangle DCE$  by which property?



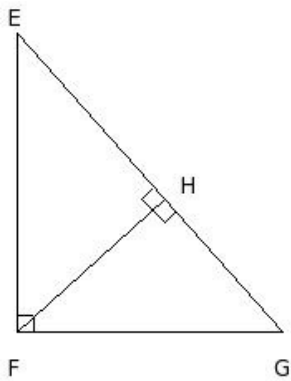
- (i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

31. With the data in the given figure,  $\triangle EOF \cong \triangle EOG$  by which property?



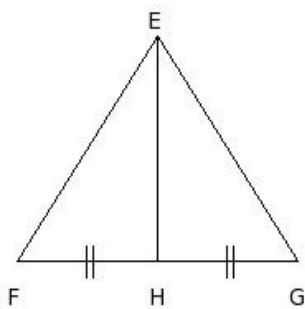
- (i) not congruent (ii) ASA Congruency (iii) SAS Congruency (iv) RHS Congruency (v) SSS Congruency

32. With the data in the figure,  $\triangle EHF \cong \triangle GHF$  by which property?



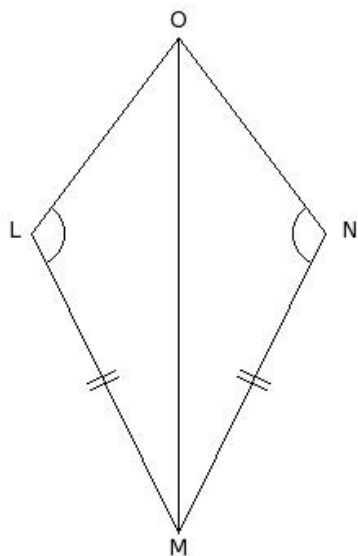
- (i) SSS Congruency (ii) RHS Congruency (iii) not congruent (iv) ASA Congruency (v) SAS Congruency

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



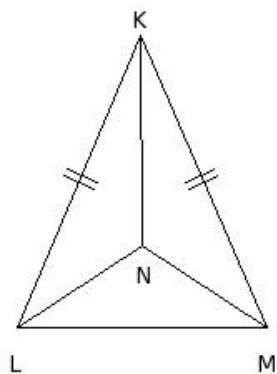
- (i) SAS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) SSS Congruency (v) not congruent

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



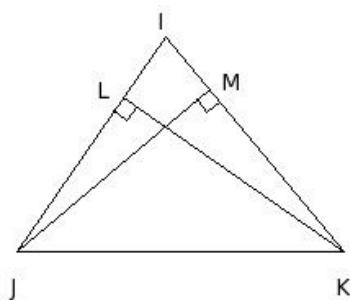
- (i) SAS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) not congruent

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



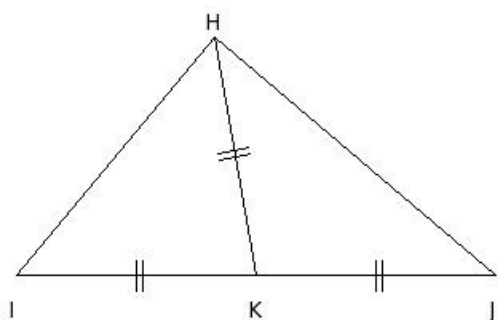
- (i) SSS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) RHS Congruency (v) not congruent

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



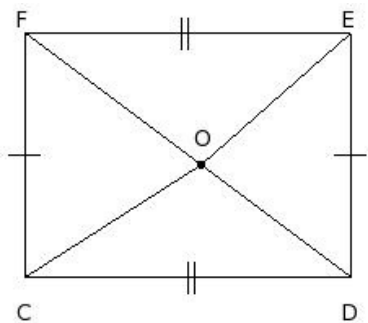
- (i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

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



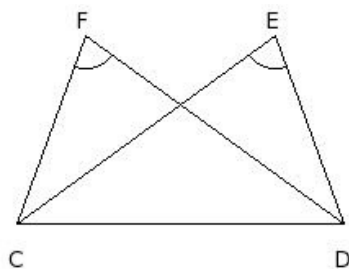
- (i) ASA Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) RHS Congruency (v) not congruent

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



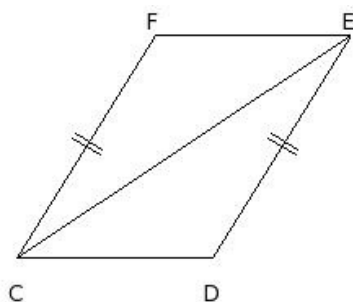
- (i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency (v) not congruent

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



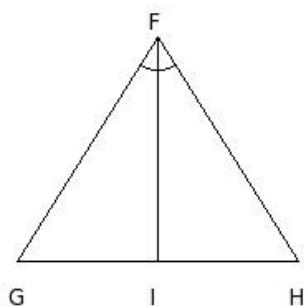
- (i) SSS Congruency (ii) not congruent (iii) SAS Congruency (iv) RHS Congruency (v) ASA Congruency

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



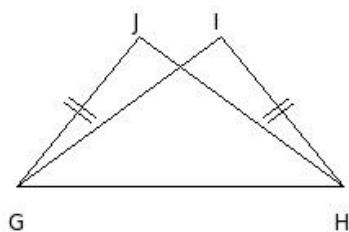
- (i) SSS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) RHS Congruency (v) not congruent

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



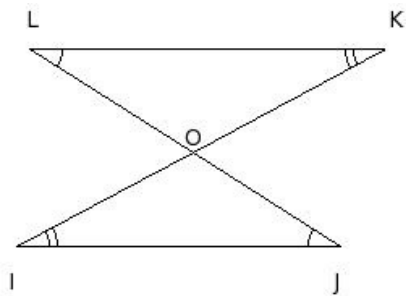
- (i) SSS Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) not congruent (v) ASA Congruency

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



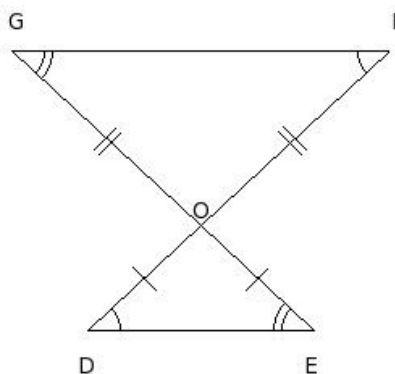
- (i) not congruent (ii) ASA Congruency (iii) SAS Congruency (iv) RHS Congruency (v) SSS Congruency

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



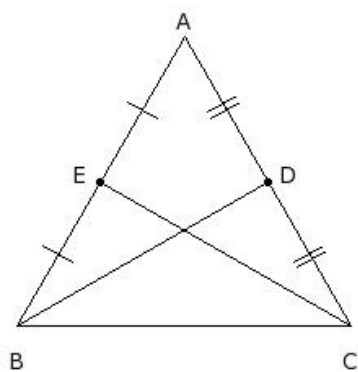
- (i) ASA Congruency (ii) not congruent (iii) SAS Congruency (iv) SSS Congruency (v) RHS Congruency

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



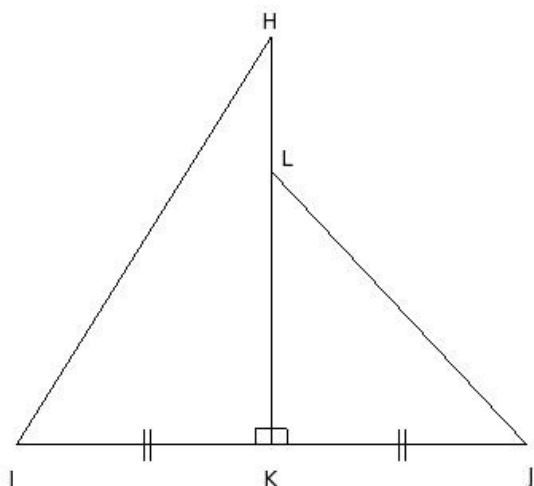
- (i) SAS Congruency (ii) not congruent (iii) ASA Congruency (iv) SSS Congruency (v) RHS Congruency

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



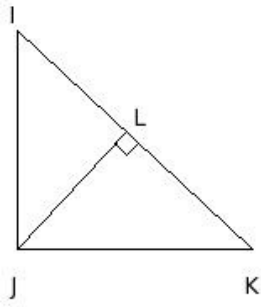
- (i) SSS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) not congruent

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



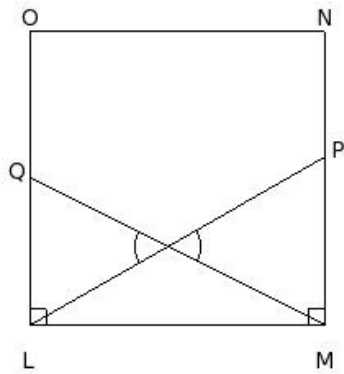
- (i) SAS Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) ASA Congruency (v) not congruent

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



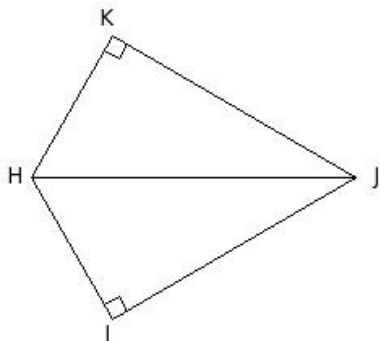
- (i) RHS Congruency (ii) SAS Congruency (iii) not congruent (iv) ASA Congruency (v) SSS Congruency

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



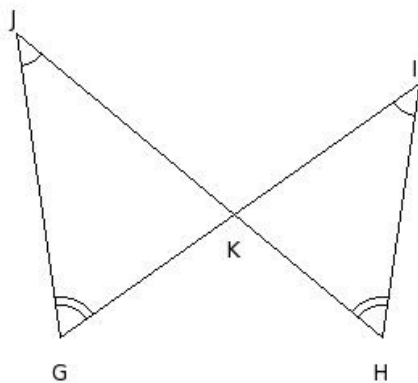
- (i) RHS Congruency (ii) SAS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) not congruent

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



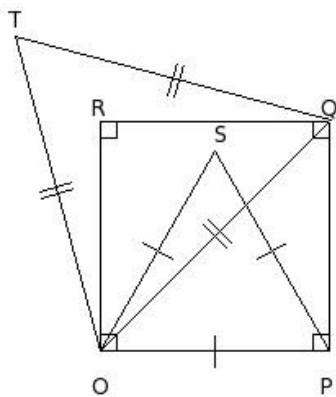
- (i) RHS Congruency (ii) ASA Congruency (iii) not congruent (iv) SSS Congruency (v) SAS Congruency

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



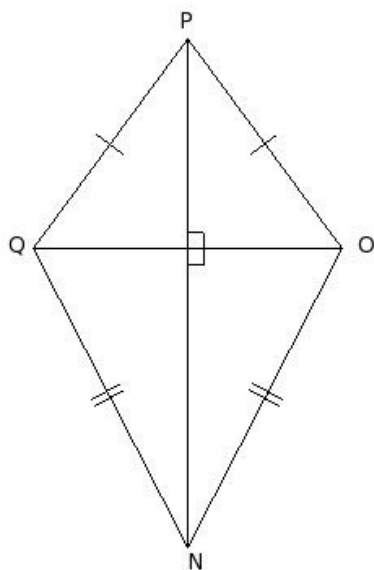
- (i) SSS Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) ASA Congruency

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



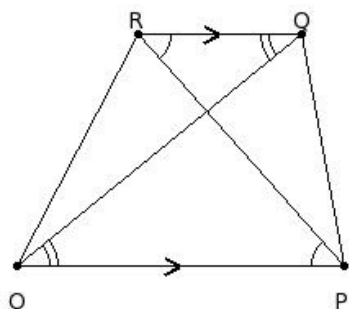
- (i) SAS Congruency (ii) RHS Congruency (iii) not congruent (iv) SSS Congruency (v) ASA Congruency

52. With the data in the given figure,  $\triangle NOQ \cong \triangle POQ$  by which property?



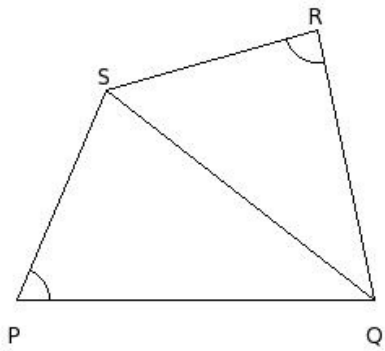
- (i) SAS Congruency (ii) SSS Congruency (iii) not congruent (iv) ASA Congruency (v) RHS Congruency

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



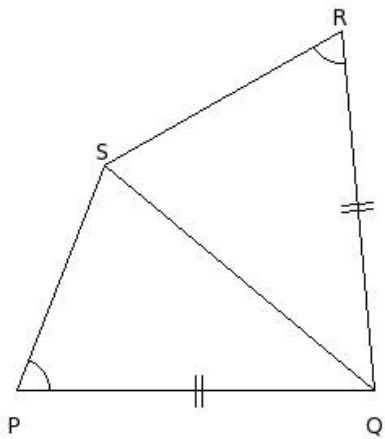
- (i) RHS Congruency (ii) SAS Congruency (iii) ASA Congruency (iv) SSS Congruency (v) not congruent

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



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

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



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

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

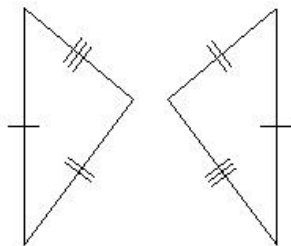


fig 3

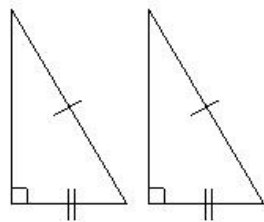


fig 4

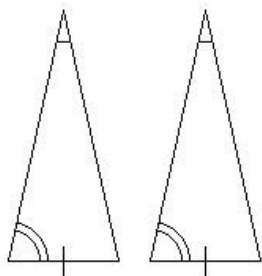


fig 1

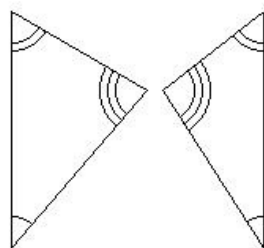


fig 2

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

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

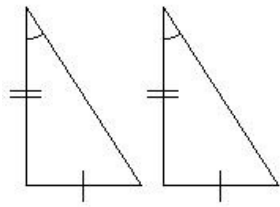


fig 3

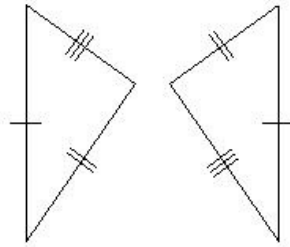


fig 4

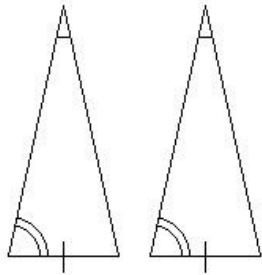


fig 1

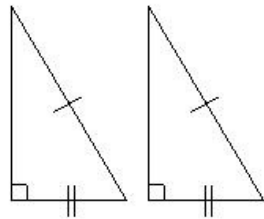


fig 2

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

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

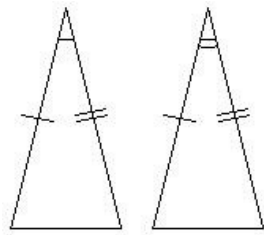


fig 3

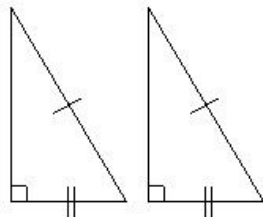


fig 4

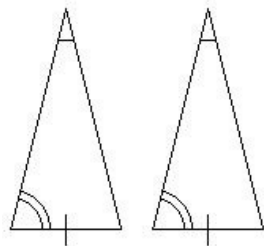


fig 1

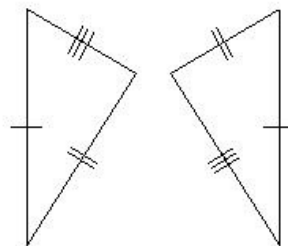


fig 2

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

## Assignment Key

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