EduSahara™ Learning Center Assignment

Grade : Class IX, SSC
Chapter : Triangles
Name : Congruence of Triangles

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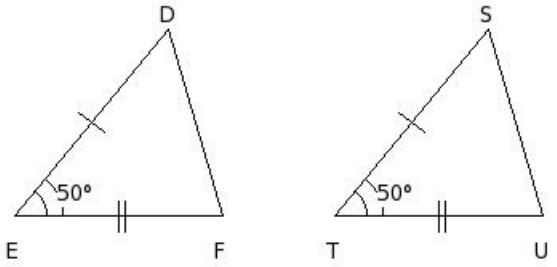
1. Identify the property by which the two given triangles are congruent



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

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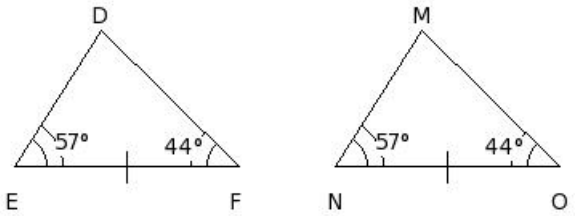
2. Identify the property by which the two given triangles are congruent



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

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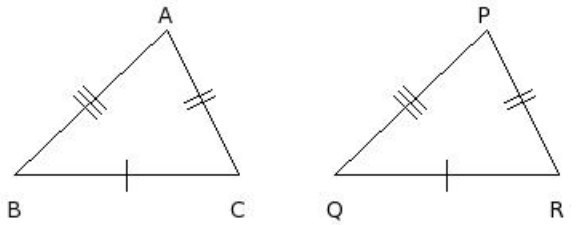
3. Identify the property by which the two given triangles are congruent



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

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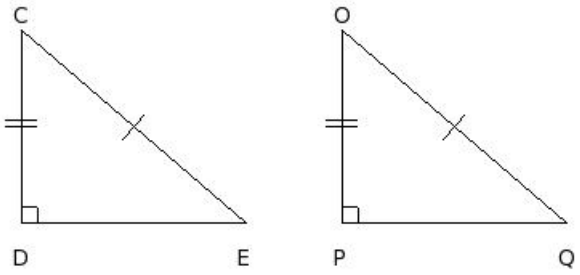
4. Identify the property by which the two given triangles are congruent



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

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

(i) $\triangle EFG \cong \triangle VWU$
(ii) $\triangle EFG \cong \triangle WUV$
(iii) $\triangle EFG \cong \triangle WVU$
(iv) $\triangle EFG \cong \triangle UVW$
(v) $\triangle FGE \cong \triangle UVW$

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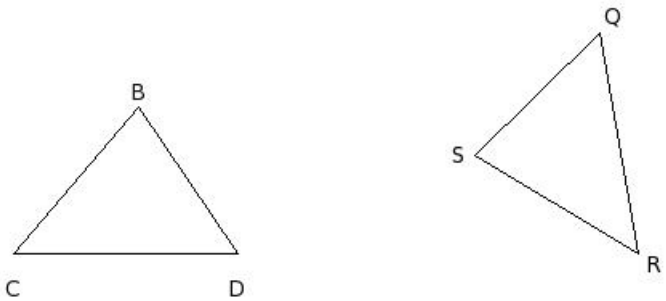
6. In the given figure, $\triangle BCD \cong \triangle SRQ$. Which of the following are true ?

a) $\angle C = \angle R$
b) $\angle B = \angle Q$
c) CD = SR
d) CD = RQ
e) $\angle D = \angle Q$



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

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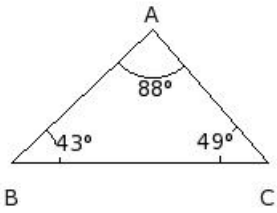
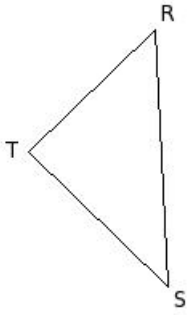
7. In the given figure, $\triangle ABC \cong \triangle TSR$. Which of the following are true ?

a) $\angle R = 88°$
b) $\angle R = 49°$
c) $\angle T = 43°$
d) $\angle S = 43°$
e) $\angle T = 88°$

f) ∠S = 49°





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

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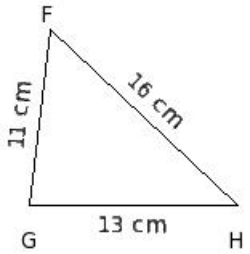
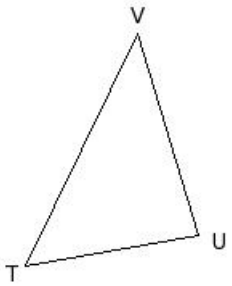
8. In the given figure, △FGH ≅ △TUV. Which of the following are true ?

a) UV = 11 cm
b) TU = 13 cm
c) VT = 11 cm
d) VT = 16 cm
e) UV = 13 cm
f) TU = 11 cm





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

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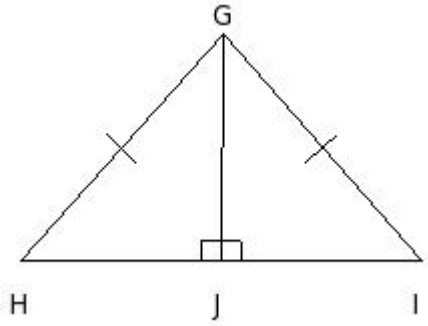
9. With the data in the given figure, △GHJ ≅ △GIJ by which property ?



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

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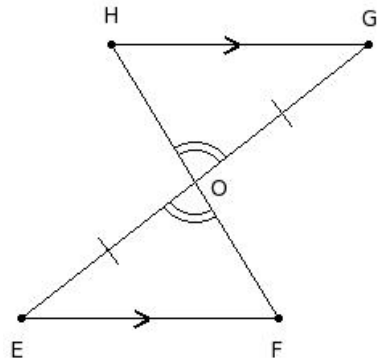
10. With the data in the given figure, △OHG ≅ △OFE by which property ?



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

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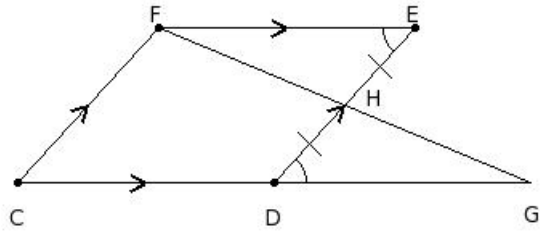
11. With the given data in the figure, △FEH ≅ △GDH by which property ?



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

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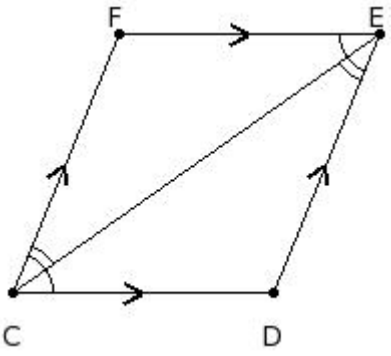
12. With the given data in the figure, △CDE ≅ △EFC by which property ?



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

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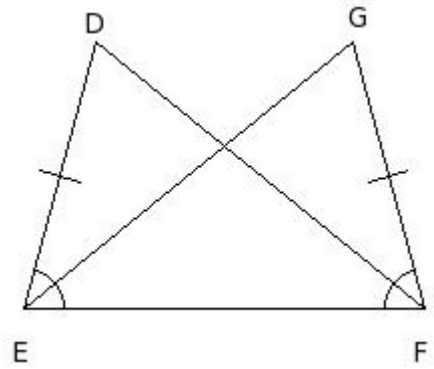
13. With the given data in the figure, △DEF ≅ △GFE by which property ?



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

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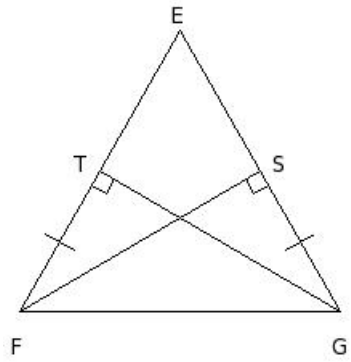
14. With the given data in the figure, △TFG ≅ △SGF by which property ?



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

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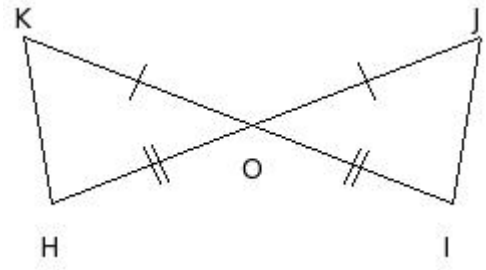
15. With the data in the given figure, △HKO ≅ △IJO by which property ?



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

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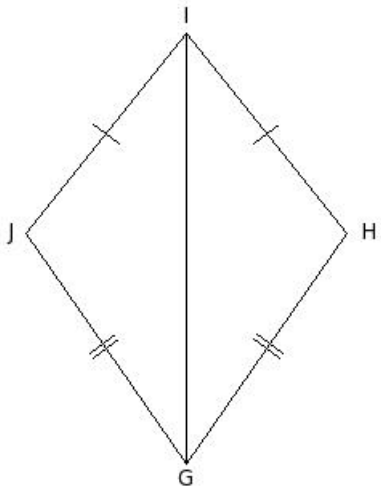
16. With the data in the given figure, △GJI ≅ △GHI by which property ?



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

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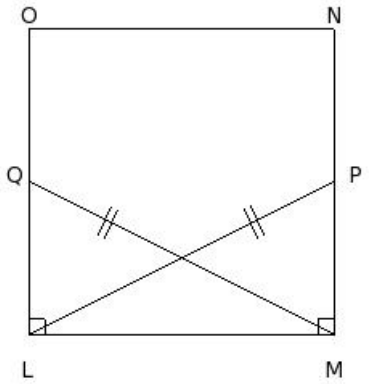
17. With the data in the given figure, △QLM ≅ △PML by which property ?



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

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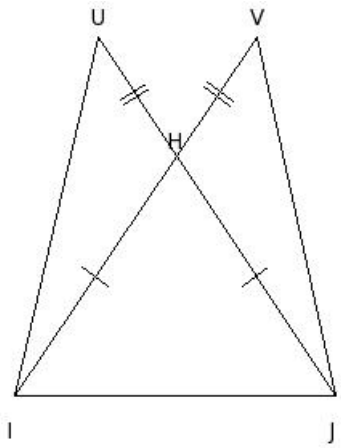
18. With the data in the given figure, △UIJ ≅ △VJI by which property ?



(i) ASA Congruency

(ii) SSS Congruency

(iii) RHS Congruency

(iv) SAS Congruency

(v) not congruent

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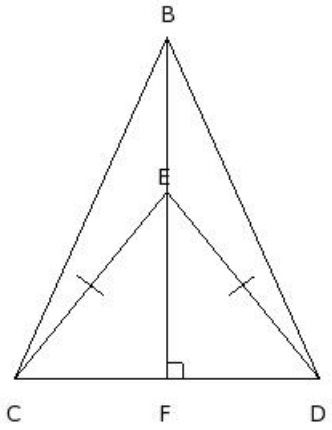
19. In the given figure, $\triangle ECD$ is an isosceles triangle. $BF \perp CD$ passing through E. $\triangle BEC \cong \triangle BED$ by which property ?



(i) RHS Congruency

(ii) ASA Congruency

(iii) SSS Congruency

(iv) not congruent

(v) SAS Congruency

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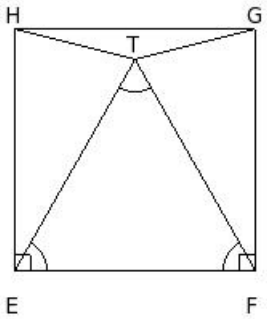
20. In the given figure, EFGH is a square and $\triangle TEF$ is an equilateral triangle. $\triangle THE \cong \triangle TGF$ by which property ?



(i) not congruent

(ii) ASA Congruency

(iii) RHS Congruency

(iv) SAS Congruency

(v) SSS Congruency

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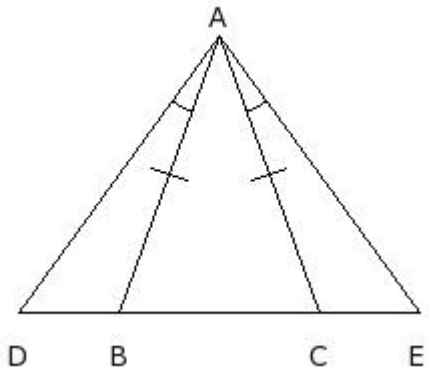
21. With the data in the given figure, $\triangle ABD \cong \triangle ACE$ by which property ?



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

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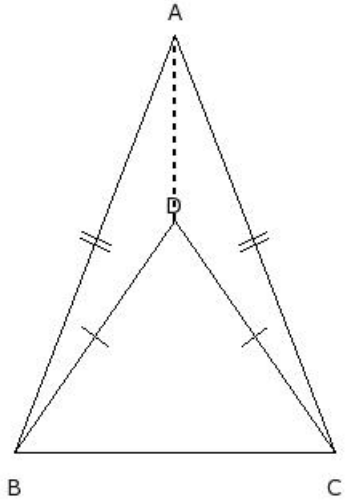
22. With the data in the given figure, △ADB ≅ △ADC by which property ?



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

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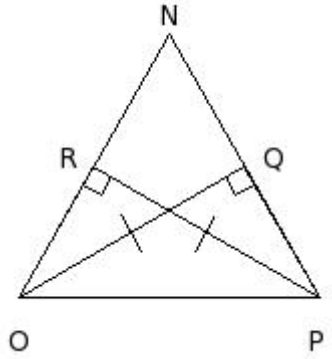
23. With the data in the given figure, △OQP ≅ △PRO by which property ?



(i) SAS Congruency
(ii) ASA Congruency

(iii) SSS Congruency

(iv) RHS Congruency

(v) not congruent

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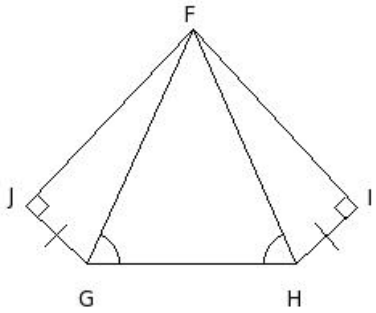
24. With the data in the given figure, △FGJ ≅ △FHI by which property ?



(i) ASA Congruency

(ii) RHS Congruency

(iii) SSS Congruency

(iv) not congruent

(v) SAS Congruency

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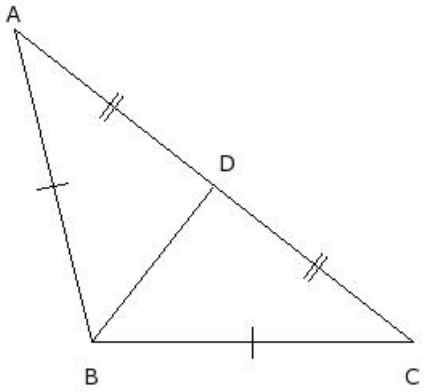
25. In the given figure, △ABC is an obtuse angled triangle. △ABD ≅ △CBD by which property ?



(i) SAS Congruency

(ii) not congruent

(iii) RHS Congruency

(iv) ASA Congruency

(v) SSS Congruency

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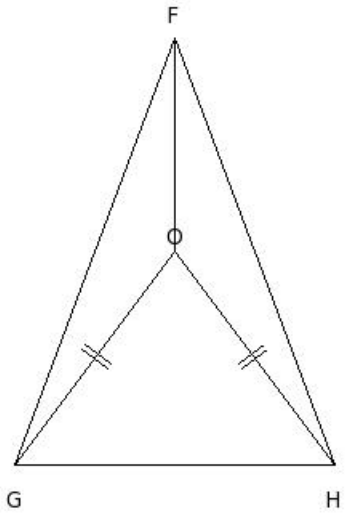
26. With the data in the given figure, △FOG ≅ △FOH by which property ?



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

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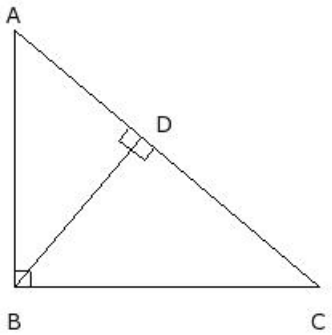
27. With the data in the figure, △ADB ≅ △CDB by which property ?



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

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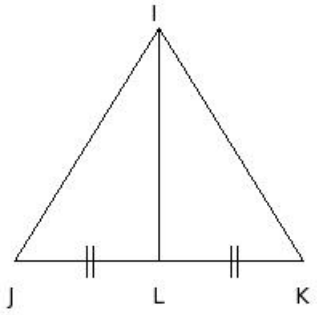
28. With the data in the figure, △ILJ ≅ △ILK by which property ?



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

(v) ASA Congruency

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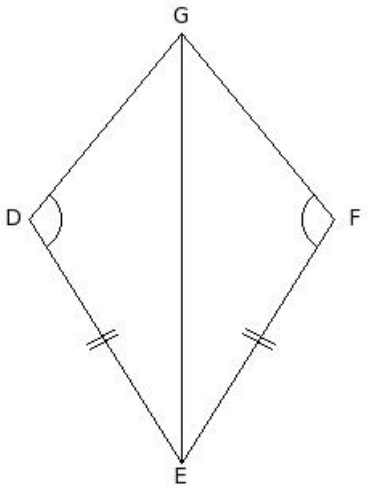
29. With the data in the figure, △DGE ≅ △FGE by which property ?



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

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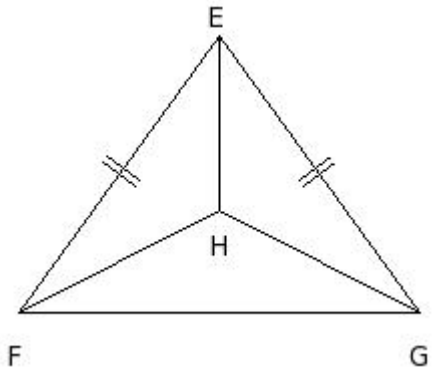
30. With the data in the figure, △EFH ≅ △EGH by which property ?



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

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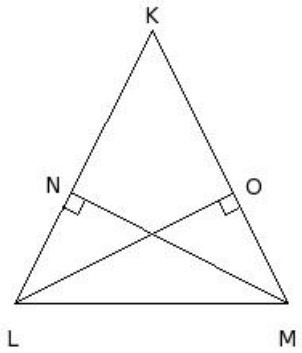
31. With the data in the figure, △LOM ≅ △MNL by which property ?



(i) SSS Congruency

(ii) ASA Congruency

(iii) SAS Congruency

(iv) not congruent

(v) RHS Congruency

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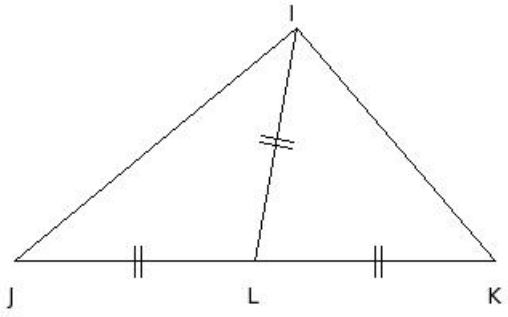
32. With the data in the figure, △ILJ ≅ △ILK by which property ?



(i) RHS Congruency

(ii) ASA Congruency

(iii) SSS Congruency

(iv) SAS Congruency

(v) not congruent

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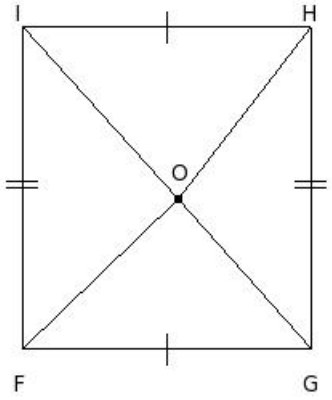
33. With the data in the figure, △FOG ≅ △IOH by which property ?



(i) RHS Congruency

(ii) ASA Congruency

(iii) SAS Congruency

(iv) not congruent

(v) SSS Congruency

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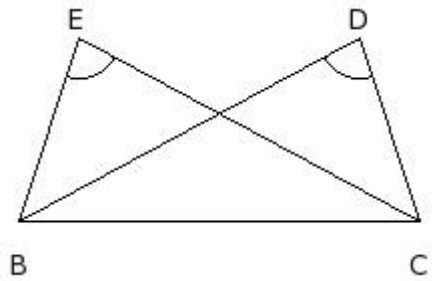
34. With the data in the figure, △BCE ≅ △CBD by which property ?



(i) not congruent

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

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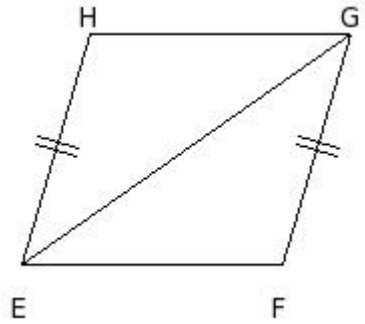
35. With the data in the figure, △EGH ≅ △GEF by which property ?



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

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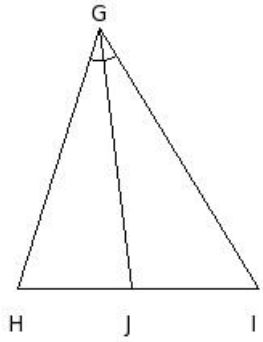
36. With the data in the figure, △GJH ≅ △GJI by which property ?



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

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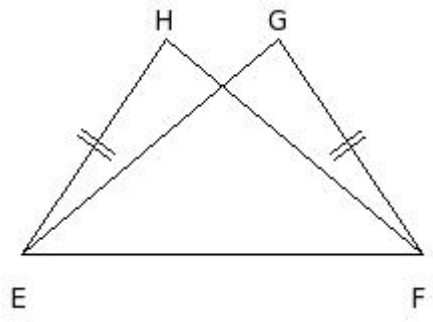
37. With the data in the figure, △EHF ≅ △FGE by which property ?



(i) RHS Congruency
(ii)

SAS Congruency

(iii) SSS Congruency

(iv) not congruent

(v) ASA Congruency

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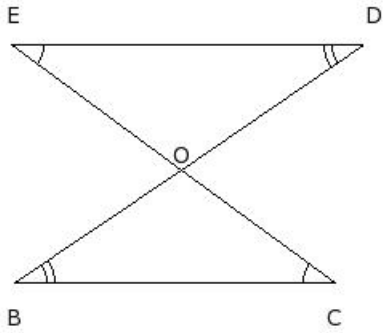
38. With the data in the figure, △BOC ≅ △DOE by which property ?



(i) RHS Congruency

(ii) not congruent

(iii) ASA Congruency

(iv) SAS Congruency

(v) SSS Congruency

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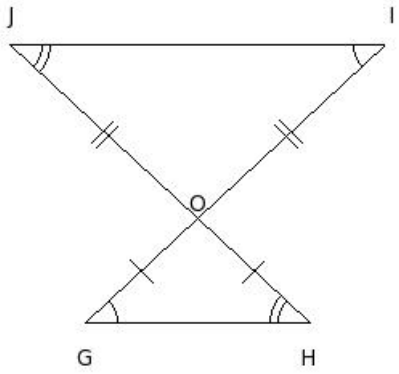
39. With the data in the figure, △GOH ≅ △IOJ by which property ?



(i) ASA Congruency

(ii) not congruent

(iii) RHS Congruency

(iv) SAS Congruency

(v) SSS Congruency

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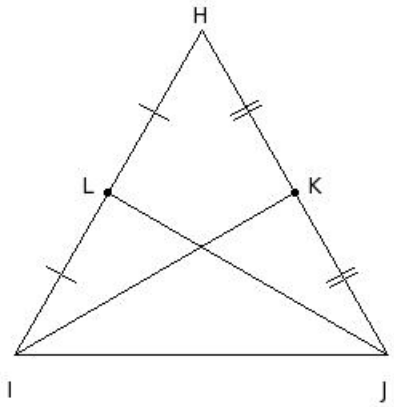
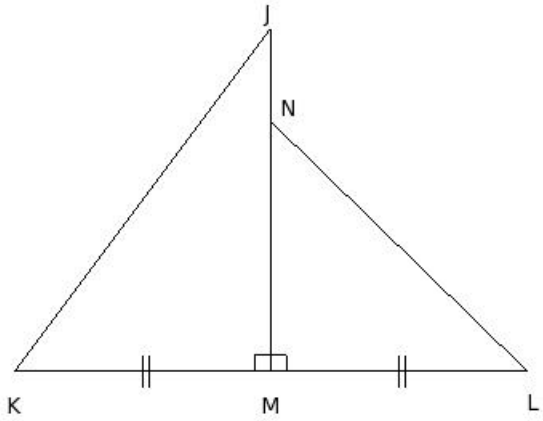
40. With the data in the figure, △IJL ≅ △JIK by which property ?



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

---

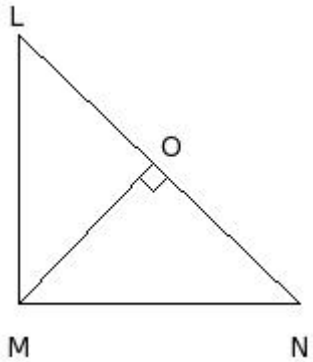
41. With the data in the figure, △JKM ≅ △NLM by which property ?



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

---

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



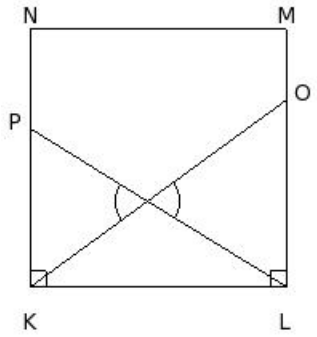
(i) SSS Congruency
(ii) ASA Congruency
(iii) RHS Congruency

(iv) SAS Congruency

(v) not congruent

---

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



(i) not congruent

(ii) RHS Congruency

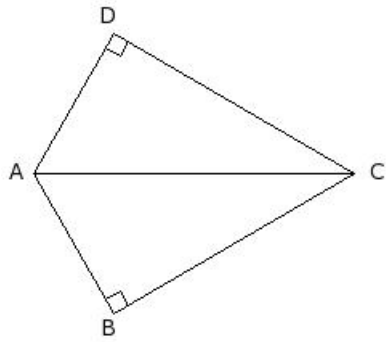
(iii) ASA Congruency

(iv) SSS Congruency

(v) SAS Congruency

---

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



(i) RHS Congruency

(ii) SSS Congruency

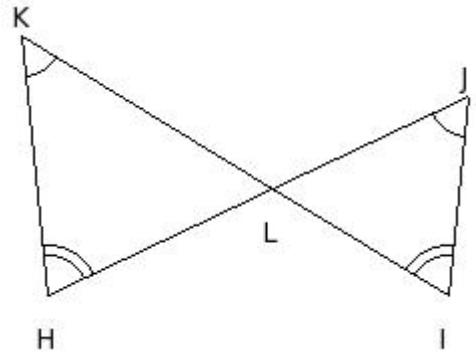
(iii) SAS Congruency

(iv) not congruent

(v) ASA Congruency

---

45. With the data in the figure, △HLK ≅ △ILJ by which property ?



(i) SSS Congruency

(ii) SAS Congruency

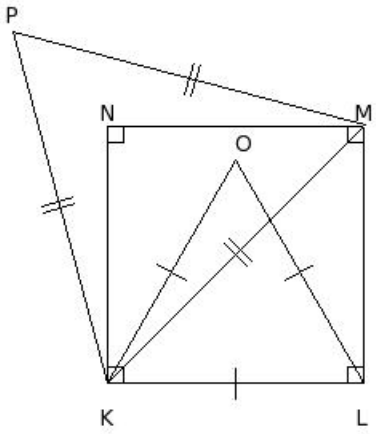
(iii) not congruent

(iv) ASA Congruency

(v) RHS Congruency

---

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



(i) ASA Congruency

(ii) SSS Congruency

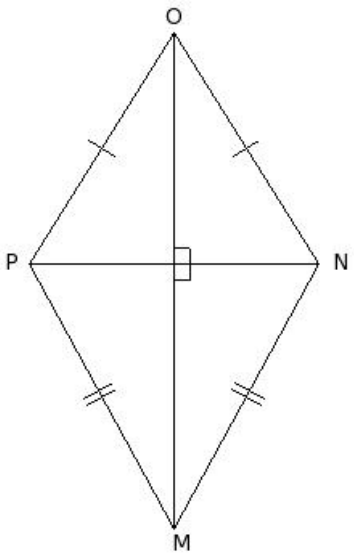
(iii) not congruent

(iv) SAS Congruency

(v) RHS Congruency

---

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



(i) not congruent

(ii) SSS Congruency

(iii) ASA Congruency

(iv) RHS Congruency

(v) SAS Congruency

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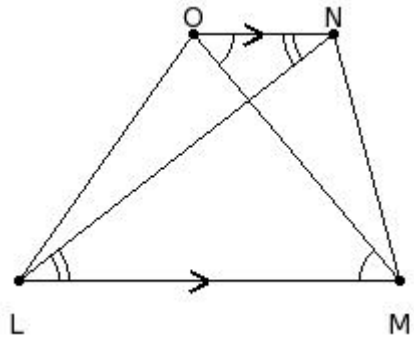
48. With the data in the given figure, △LMO ≅ △MLN by which property ?



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

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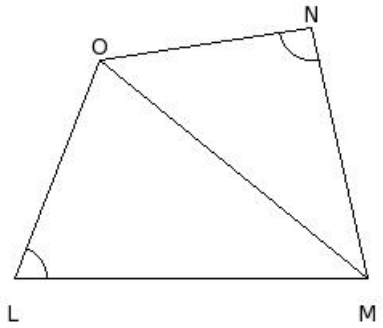
49. With the data in the given figure, △LMO ≅ △NOM by which property ?



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

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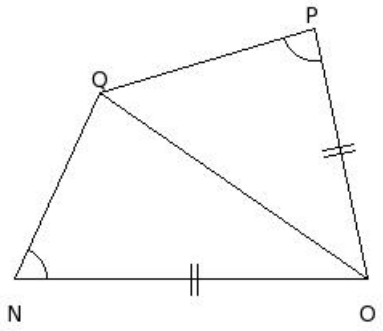
50. With the data in the given figure, △NOQ ≅ △POQ by which property ?



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

Assignment Key

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