EduSahara™ Learning Center Assignment

Grade : Class VII, CBSE
Chapter : Congruence of Triangles
Name : Congruency of Triangles
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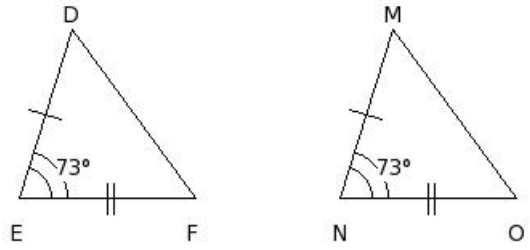
1. Identify the property by which the two given triangles are congruent



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

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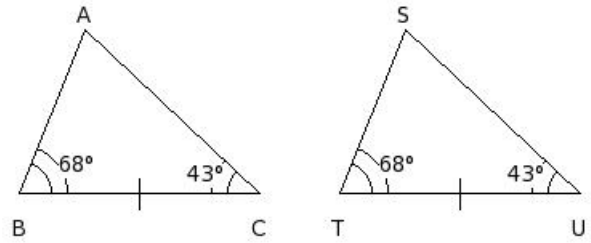
2. Identify the property by which the two given triangles are congruent



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

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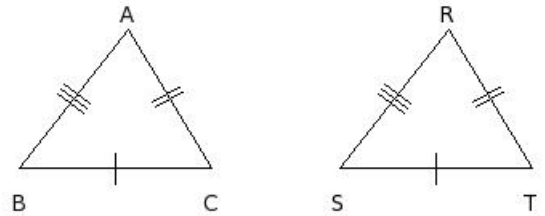
3. Identify the property by which the two given triangles are congruent



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

(iv) ASA Congruency

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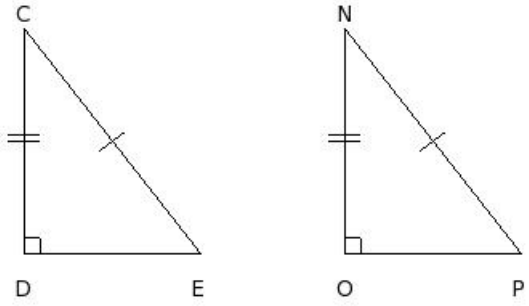
4. Identify the property by which the two given triangles are congruent



(i) SSS Congruency

(ii) RHS Congruency

(iii) SAS Congruency

(iv) ASA Congruency

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5. Which of the following are true ?

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

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

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6. Which of the following are true ?

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

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

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

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

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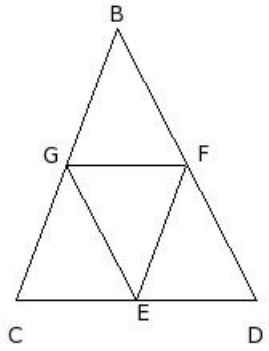
8. In the given figure, points E , F and G are the mid-points of sides CD, DB and BC of △BCD. Which of the following are true?

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



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

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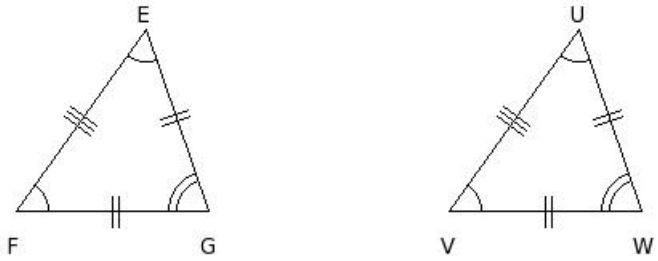
9. In the given figure, which of the following is true ?



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

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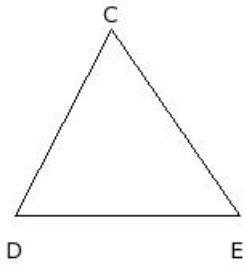
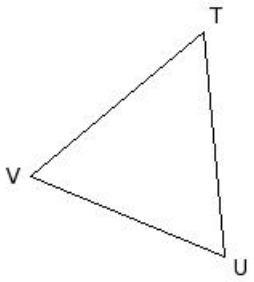
10. In the given figure, △CDE ≅ △VUT. Which of the following are true ?

a) DE = UT
b) ∠D = ∠U
c) DE = VU
d) ∠C = ∠T
e) ∠E = ∠T





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

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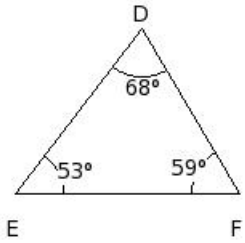
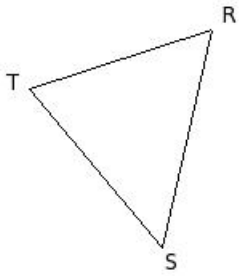
11. In the given figure, △DEF ≅ △TSR. Which of the following are true ?

a) ∠S = 59°
b) ∠S = 53°
c) ∠T = 53°
d) ∠R = 68°
e) ∠R = 59°
f) ∠T = 68°





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

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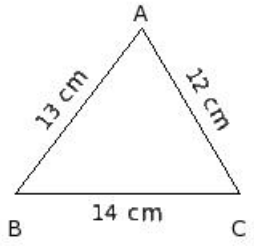
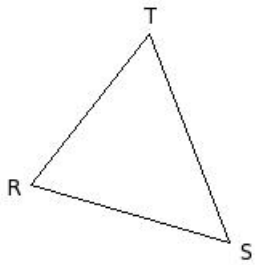
12. In the given figure, △ABC ≅ △RST. Which of the following are true ?

a) TR = 13 cm
b) TR = 12 cm
c) RS = 14 cm
d) ST = 13 cm
e) ST = 14 cm
f) RS = 13 cm





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

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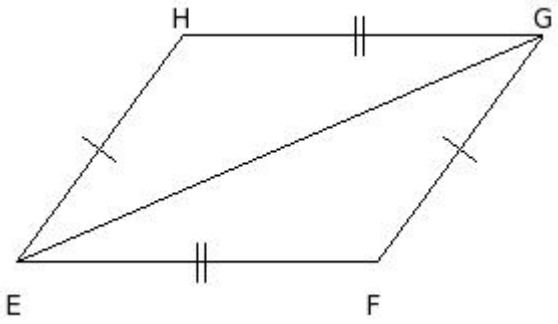
13. In the given figure, which of the following is true ?



(i) △EGH ≅ △EGF
(ii) △EGH ≅ △GEF
(iii) △EHG ≅ △EFG
(iv) △EGH ≅ △EFG
(v) △EHG ≅ △FGE

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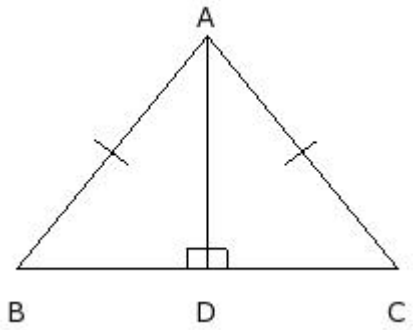
14. With the data in the given figure, △ABD ≅ △ACD by which property ?



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

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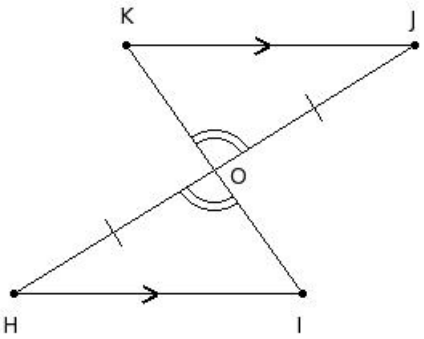
15. With the data in the given figure, △OKJ ≅ △OIH by which property ?



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

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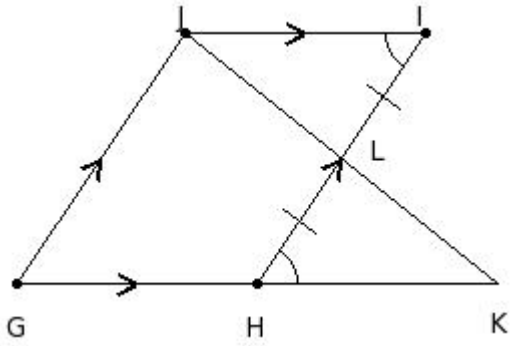
16. With the given data in the figure, △JIL ≅ △KHL by which property ?



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

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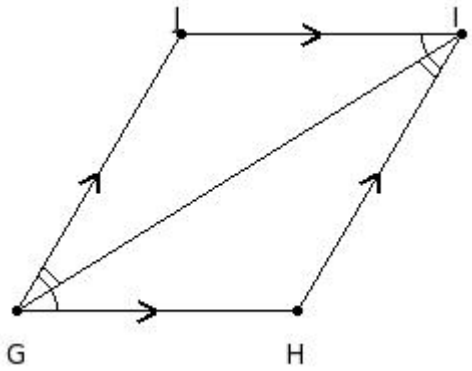
17. With the given data in the figure, △GHI ≅ △IJG by which property ?



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

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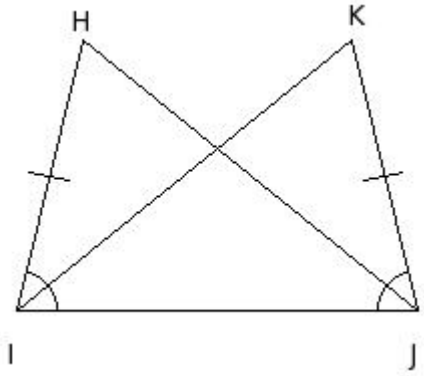
18. With the given data in the figure, △HIJ ≅ △KJI by which property ?



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

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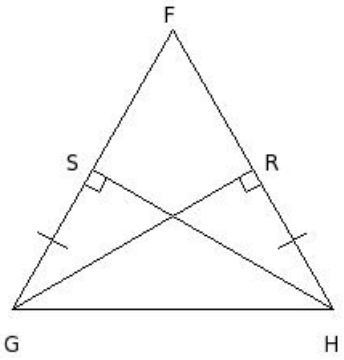
19. With the given data in the figure, △SGH ≅ △RHG by which property ?



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

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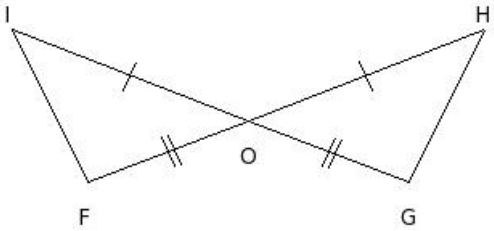
20. With the data in the given figure, △FIO ≅ △GHO by which property ?



(i) ASA Congruency
(ii) SSS Congruency
(iii) not congruent

(iv) RHS Congruency

(v) SAS Congruency

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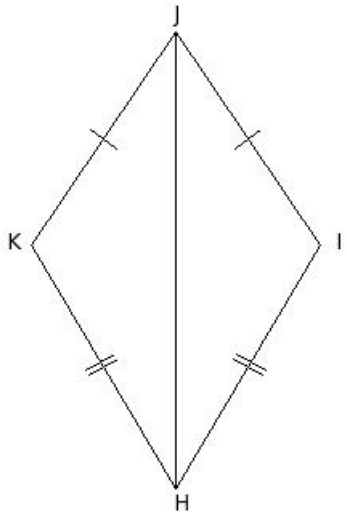
21. With the data in the given figure, △HKJ ≅ △HIJ by which property ?



(i) SAS Congruency

(ii) SSS Congruency

(iii) not congruent

(iv) RHS Congruency

(v) ASA Congruency

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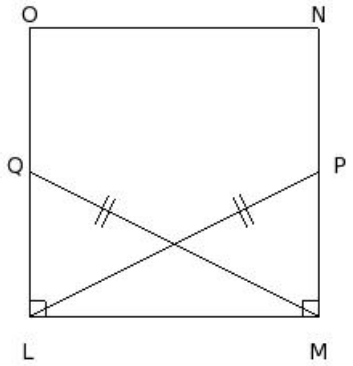
22. With the data in the given figure, △QLM ≅ △PML by which property ?



(i) SAS Congruency

(ii) ASA Congruency

(iii) RHS Congruency

(iv) SSS Congruency

(v) not congruent

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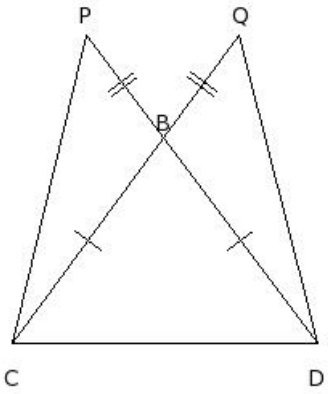
23. With the data in the given figure, △PCD ≅ △QDC by which property ?



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

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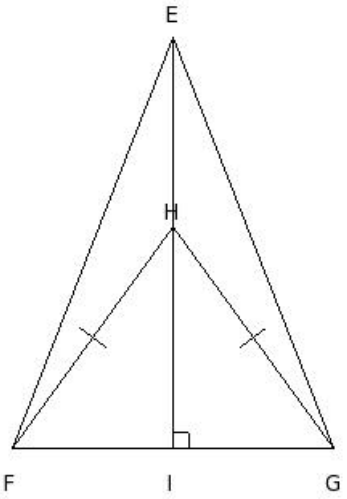
24. In the given figure, △HFG is an isosceles triangle. EI ⊥ FG passing through H. △EHF ≅ △EHG by which property ?



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

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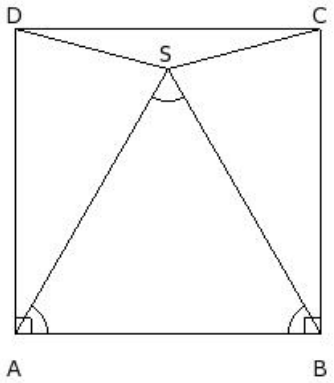
25. In the given figure, ABCD is a square and △SAB is an equilateral triangle. △SDA ≅ △SCB by which property ?



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

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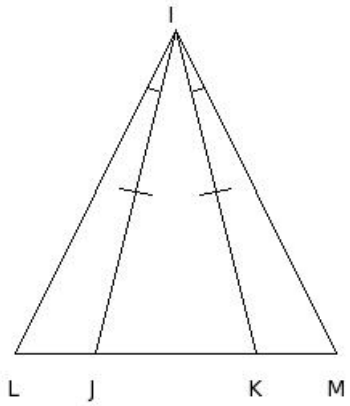
26. With the data in the given figure, △IJL ≅ △IKM by which property ?



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

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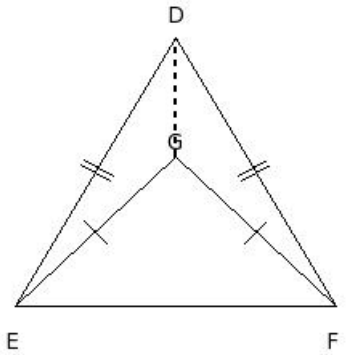
27. With the data in the given figure, △DGE ≅ △DGF by which property ?



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

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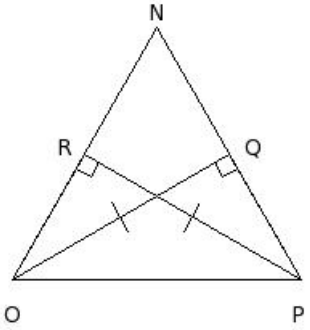
28. With the data in the given figure, △OQP ≅ △PRO by which property ?



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

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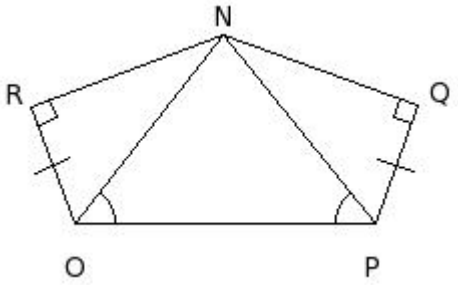
29. With the data in the given figure, △NOR ≅ △NPQ by which property ?



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

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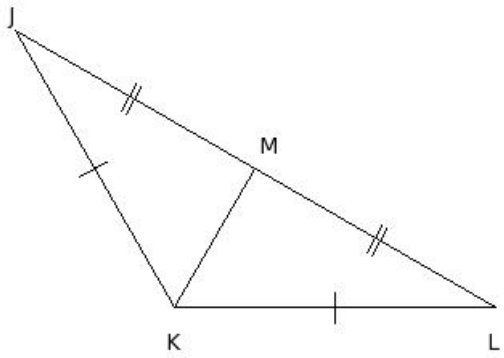
30. In the given figure, △JKL is an obtuse angled triangle. △JKM ≅ △LKM by which property ?



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

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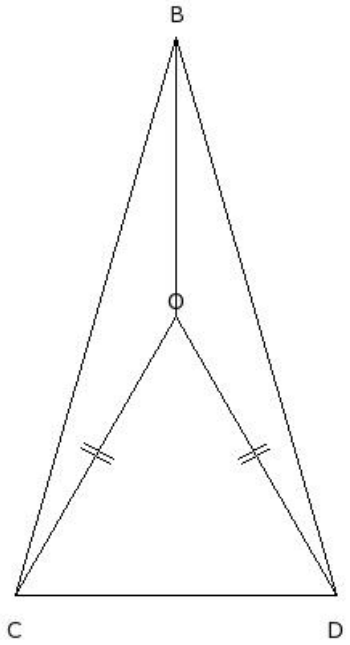
31. With the data in the given figure, △BOC ≅ △BOD by which property ?



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

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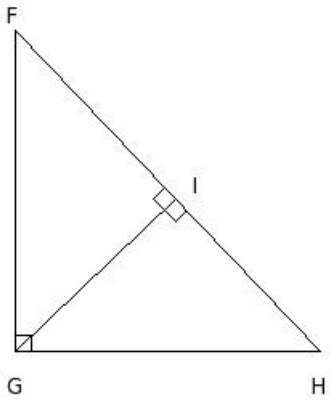
32. With the data in the figure, △FIG ≅ △HIG by which property ?



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

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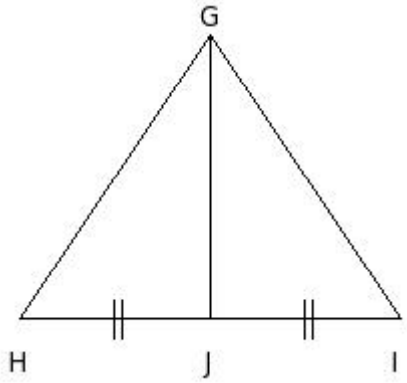
33. With the data in the figure, △GJH ≅ △GJI by which property ?



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

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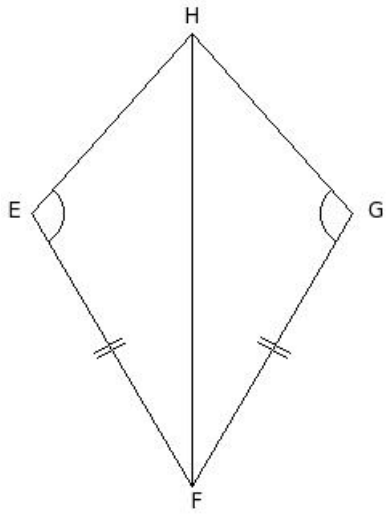
34. With the data in the figure, △EHF ≅ △GHF by which property ?



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

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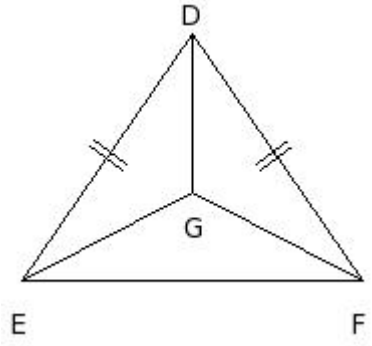
35. With the data in the figure, △DEG ≅ △DFG by which property ?



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

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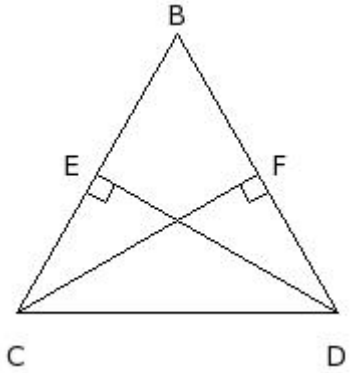
36. With the data in the figure, △CFD ≅ △DEC by which property ?



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

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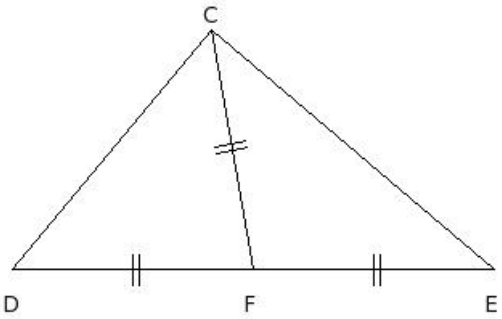
37. With the data in the figure, △CFD ≅ △CFE by which property ?



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

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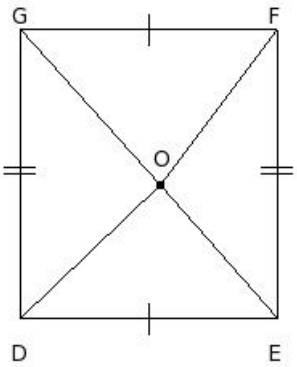
38. With the data in the figure, △DOE ≅ △GOF by which property ?



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

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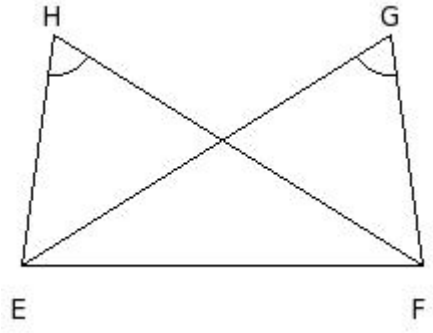
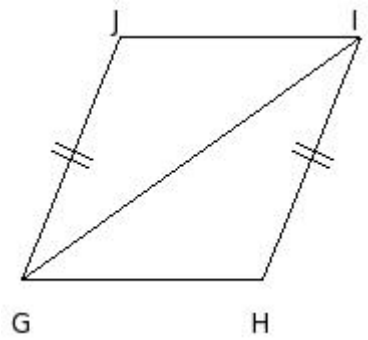
39. With the data in the figure, △EFH ≅ △FEG by which property ?



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

---

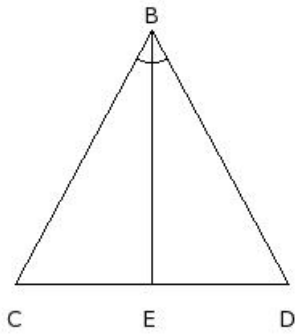
40. With the data in the figure, △GIJ ≅ △IGH by which property ?



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

---

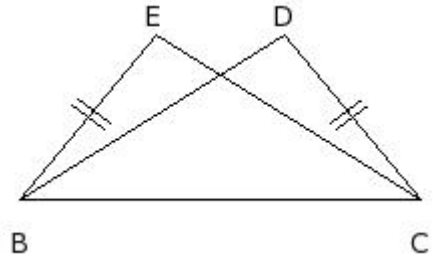
41. With the data in the figure, △BEC ≅ △BED by which property ?



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

---

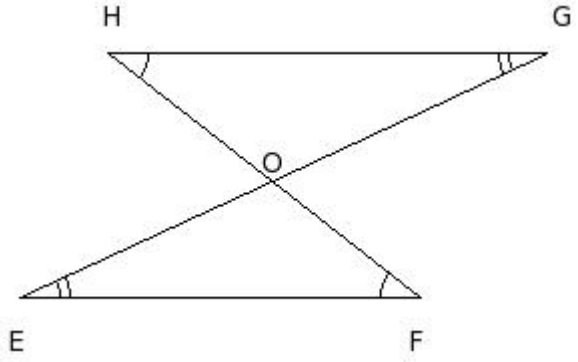
42. With the data in the figure, △BEC ≅ △CDB by which property ?



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

---

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



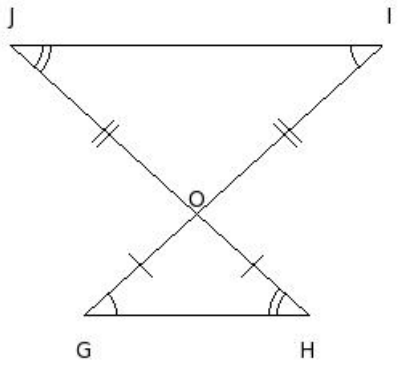
(i) not congruent
(ii) ASA Congruency
(iii) RHS Congruency

(iv) SAS Congruency

(v) SSS Congruency

---

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



(i) ASA Congruency

(ii) SAS Congruency

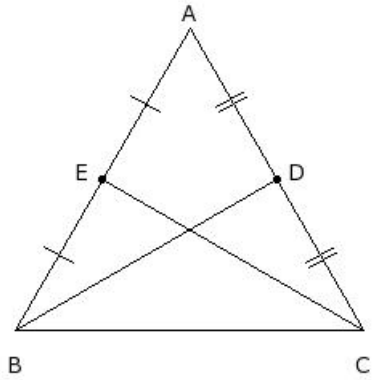
(iii) RHS Congruency

(iv) not congruent

(v) SSS Congruency

---

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



(i) SAS Congruency

(ii) ASA Congruency

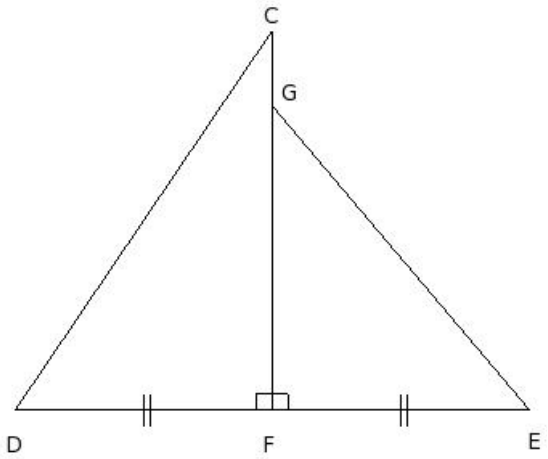
(iii) RHS Congruency

(iv) not congruent

(v) SSS Congruency

---

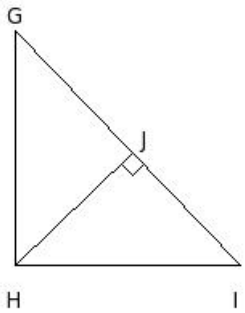
46. With the data in the figure, △CDF ≅ △GEF by which property ?



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

---

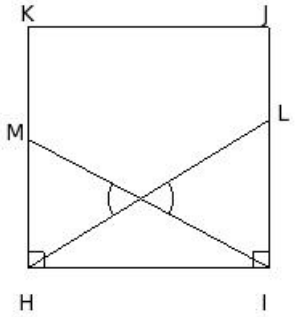
47. With the data in the figure, △GHJ ≅ △IHJ by which property ?



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

---

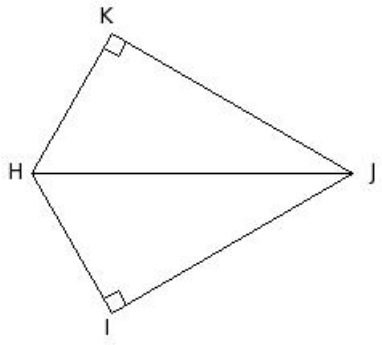
48. With the data in the figure, △HIL ≅ △IHM by which property ?



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

---

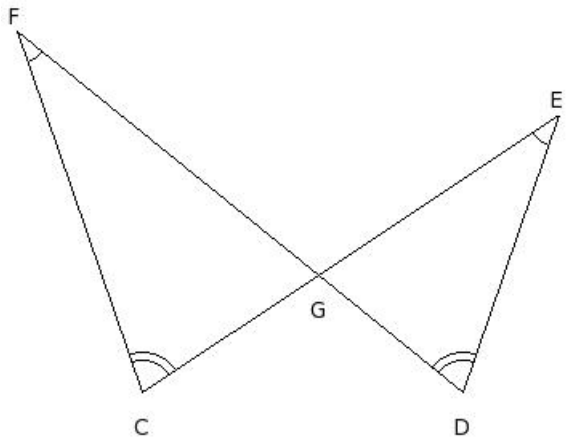
49. With the data in the figure, △HJK ≅ △HJI by which property ?



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

---

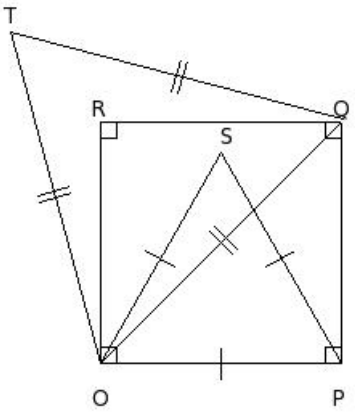
50. With the data in the figure, △CGF ≅ △DGE by which property ?



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

---

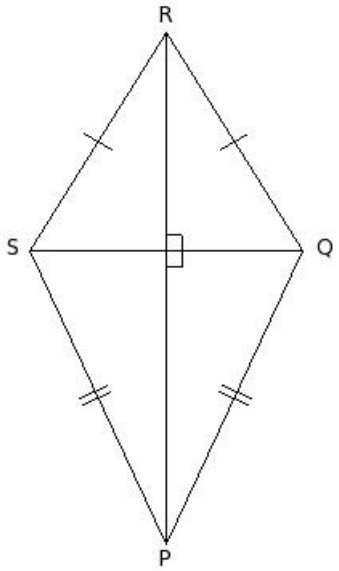
51. With the data in the figure, △OPS ≅ △OQT by which property ?



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

---

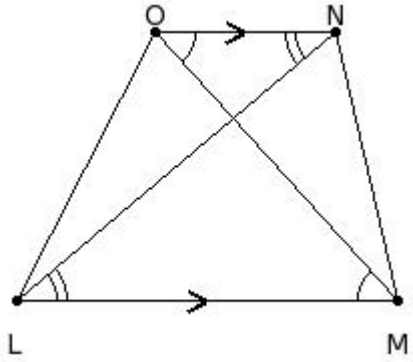
52. With the data in the given figure, △PQS ≅ △RQS by which property ?



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

---

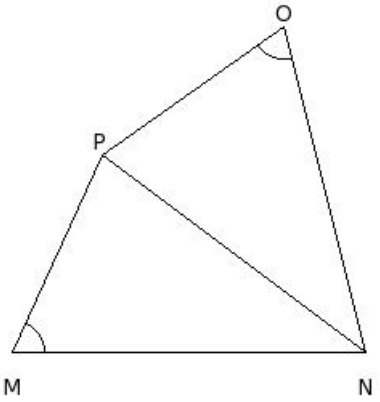
53. With the data in the given figure, △LMO ≅ △MLN by which property ?



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

---

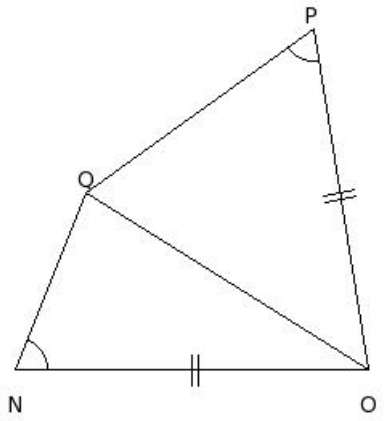
54. With the data in the given figure, △MNP ≅ △OPN by which property ?



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

---

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



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

---

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

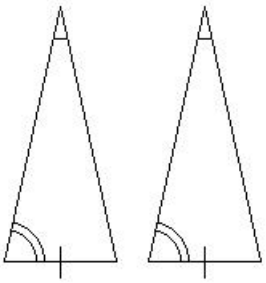


fig 3

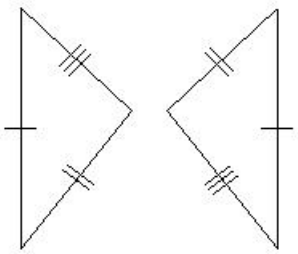


fig 4

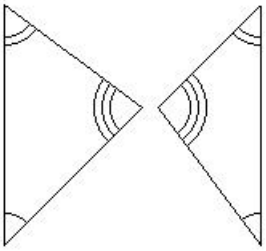


fig 1

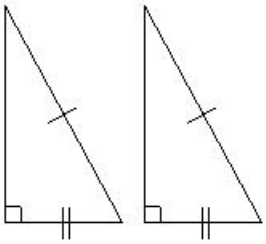


fig 2

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

---

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

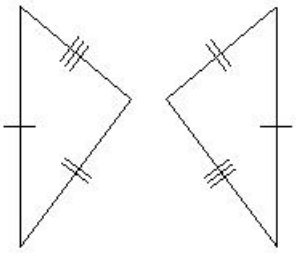


fig 3

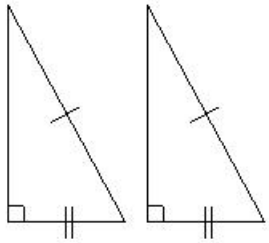


fig 4

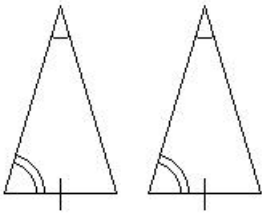


fig 1

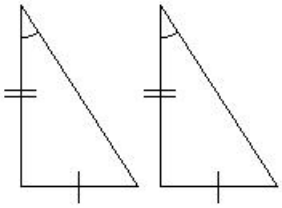


fig 2

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

---

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

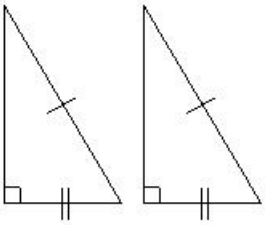


fig 3

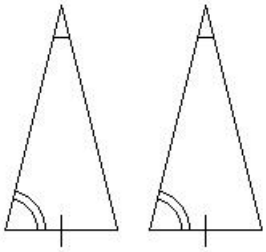


fig 4

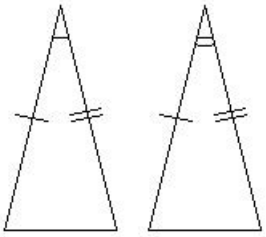


fig 1

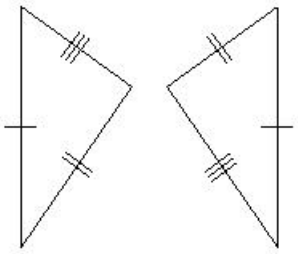


fig 2

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

Assignment Key

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

40) (iii)
41) (ii)
42) (i)
43) (i)
44) (iv)
45) (iv)
46) (ii)
47) (ii)
48) (iv)
49) (ii)
50) (iv)
51) (i)
52) (ii)
53) (ii)
54) (iv)
55) (i)
56) (iv)
57) (iv)
58) (iii)