EduSahara™ Learning Center Assignment

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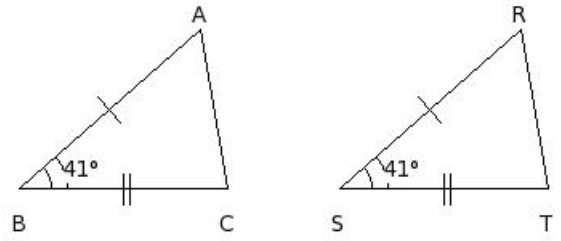
1. Identify the property by which the two given triangles are congruent



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

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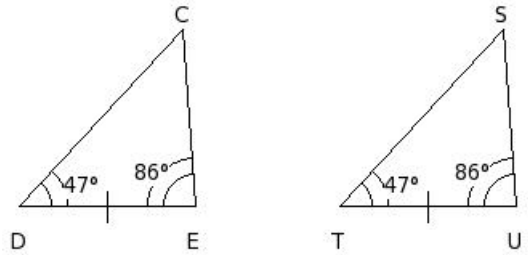
2. Identify the property by which the two given triangles are congruent



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

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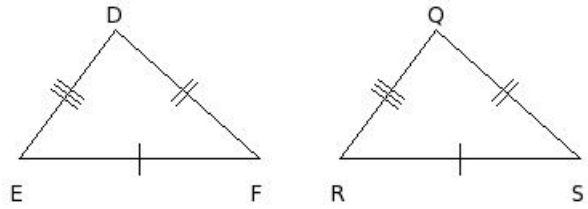
3. Identify the property by which the two given triangles are congruent



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

(iv) SSS Congruency

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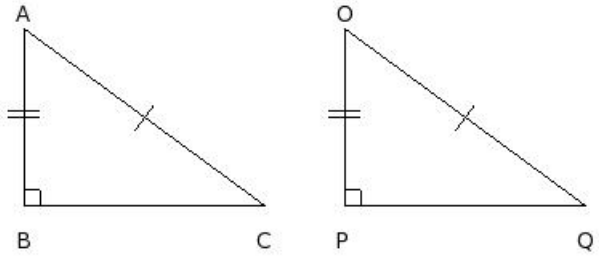
4. Identify the property by which the two given triangles are congruent



(i) ASA Congruency

(ii) SSS Congruency

(iii) SAS Congruency

(iv) RHS Congruency

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5. Which of the following are true ?

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

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

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6. Which of the following are true ?

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

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

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7. Which of the following are true ?

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

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

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8. Which of the following are true ?

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

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

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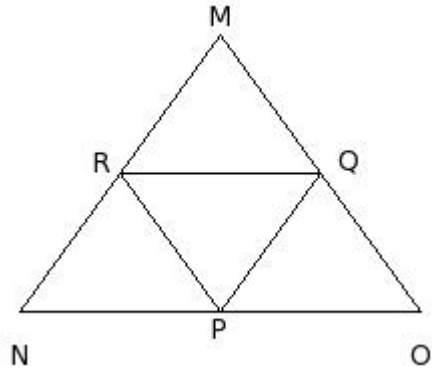
9. In the given figure, points P , Q and R are the mid-points of sides NO, OM and MN of △MNO. Which of the following are true?

a) △RNP ≅ △PQR
b) △MRQ ≅ △PQR
c) △MRQ ≅ △PRQ
d) △MRQ ≅ △QPO
e) △RNP ≅ △MRQ



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

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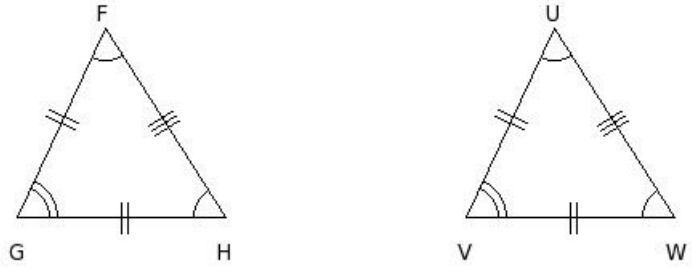
10. In the given figure, which of the following is true ?



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

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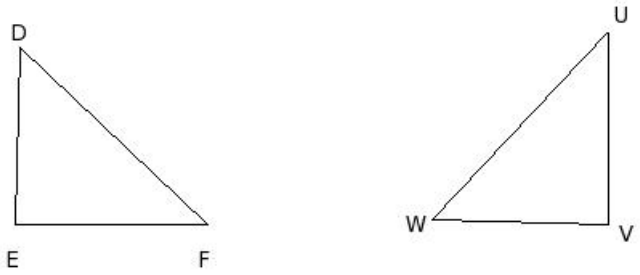
11. In the given figure, △DEF ≅ △WVU. Which of the following are true ?

a) ∠D = ∠U
b) ∠F = ∠U
c) EF = WV
d) EF = VU
e) ∠E = ∠V



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

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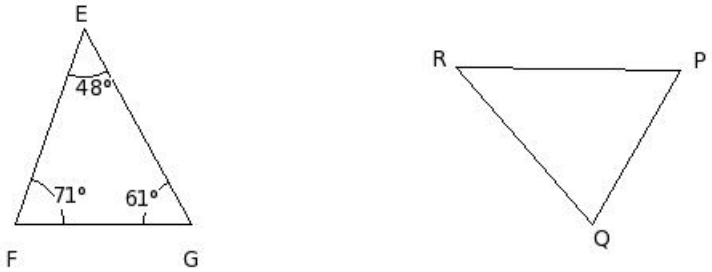
12. In the given figure, △EFG ≅ △RQP. Which of the following are true ?

a) ∠R = 71°
b) ∠Q = 61°
c) ∠P = 61°
d) ∠R = 48°
e) ∠P = 48°
f) ∠Q = 71°



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

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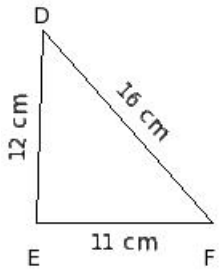
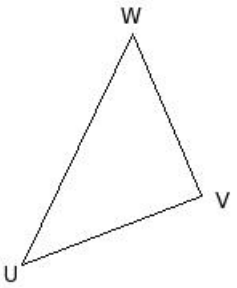
13. In the given figure, △DEF ≅ △UVW. Which of the following are true ?

a) WU = 16 cm
b) VW = 12 cm
c) VW = 11 cm
d) UV = 12 cm
e) UV = 11 cm
f) WU = 12 cm





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

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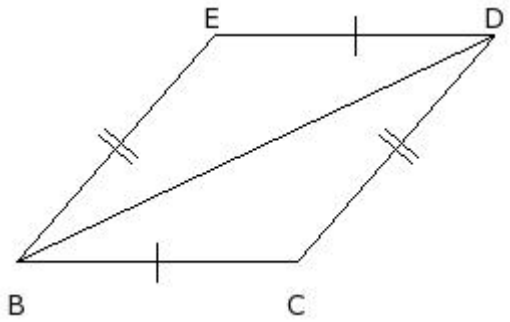
14. In the given figure, which of the following is true ?



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

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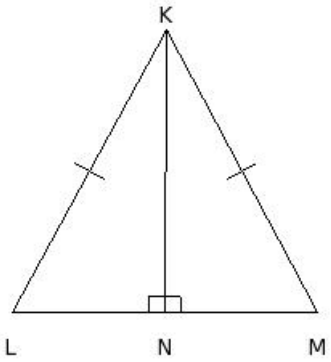
15. With the data in the given figure, △KLN ≅ △KMN by which property ?



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

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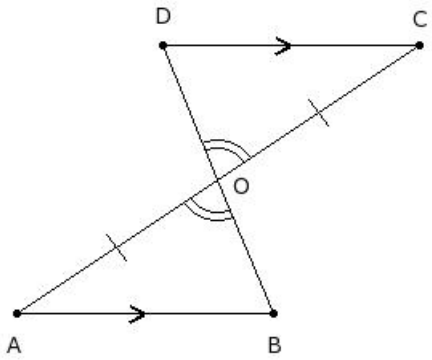
16. With the data in the given figure, △ODC ≅ △OBA by which property ?



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

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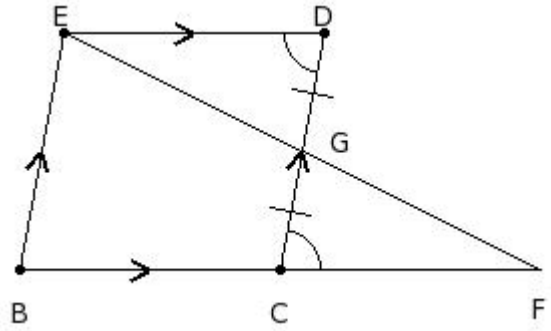
17. With the given data in the figure, △EDG ≅ △FCG by which property ?



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

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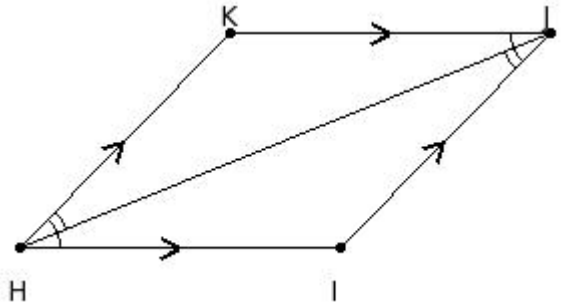
18. With the given data in the figure, △HIJ ≅ △JKH by which property ?



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

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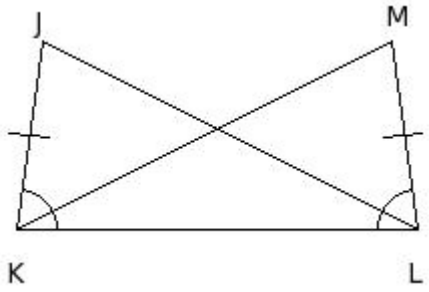
19. With the given data in the figure, △JKL ≅ △MLK by which property ?



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

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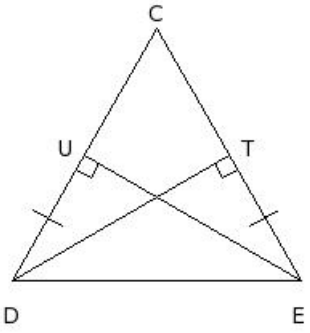
20. With the given data in the figure, △UDE ≅ △TED by which property ?



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

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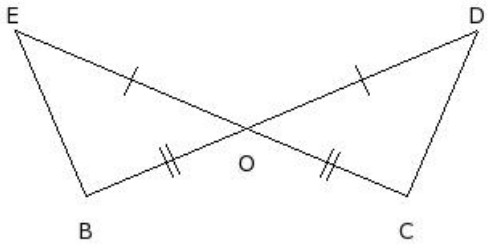
21. With the data in the given figure, △BEO ≅ △CDO by which property ?



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

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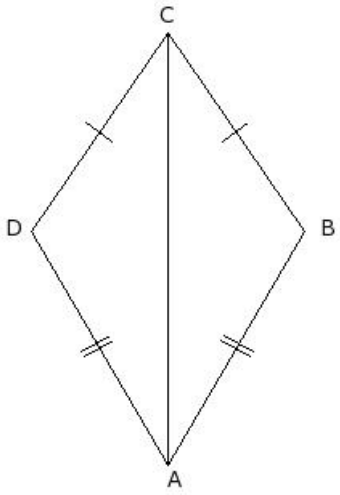
22. With the data in the given figure, △ADC ≅ △ABC by which property ?



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

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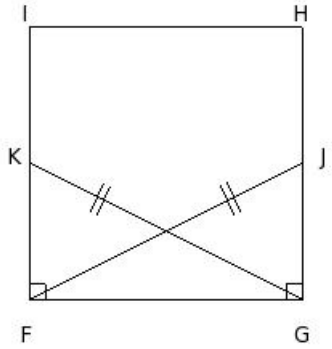
23. With the data in the given figure, △KFG ≅ △JGF by which property ?



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

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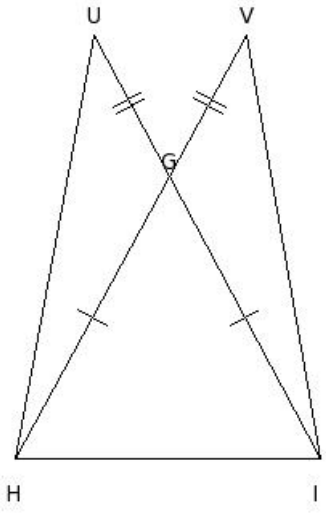
24. With the data in the given figure, △UHI ≅ △VIH by which property ?



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

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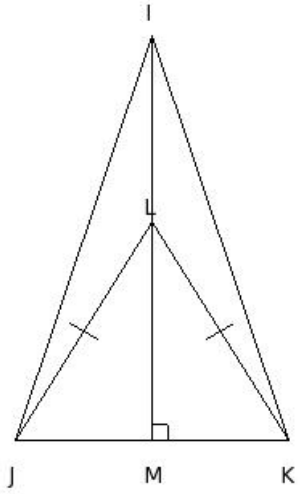
25. In the given figure, △LJK is an isosceles triangle. IM ⊥ JK passing through L. △ILJ ≅ △ILK by which property ?



(i) RHS Congruency
(ii) SAS Congruency

(iii) SSS Congruency

(iv) not congruent

(v) ASA Congruency

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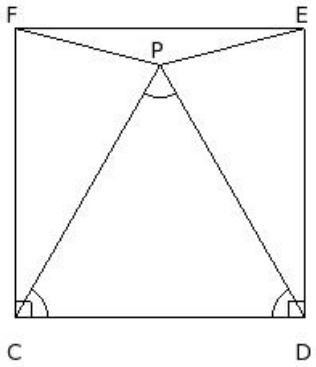
26. In the given figure, CDEF is a square and △PCD is an equilateral triangle. △PFC ≅ △PED by which property ?



(i) SSS Congruency

(ii) not congruent

(iii) RHS Congruency

(iv) ASA Congruency

(v) SAS Congruency

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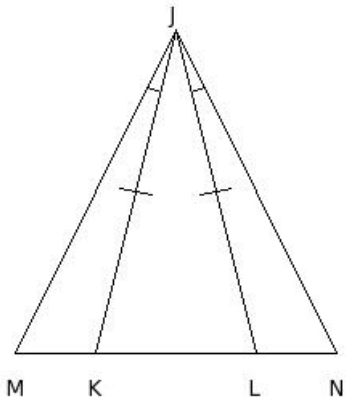
27. With the data in the given figure, △JKM ≅ △JLN by which property ?



(i) ASA Congruency

(ii) RHS Congruency

(iii) SAS Congruency

(iv) not congruent

(v) SSS Congruency

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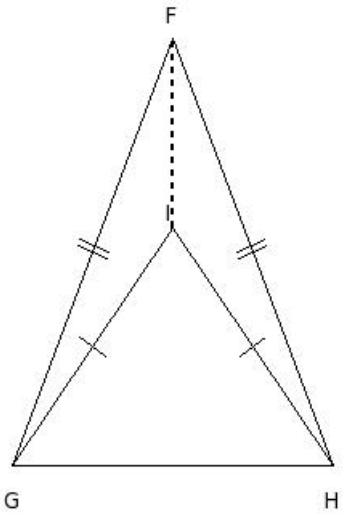
28. With the data in the given figure, △FIG ≅ △FIH by which property ?



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

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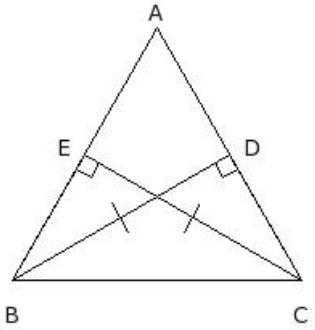
29. With the data in the given figure, △BDC ≅ △CEB by which property ?



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

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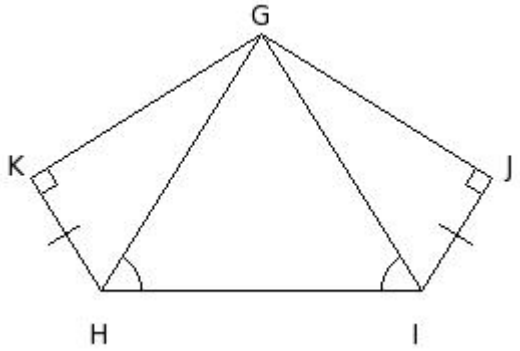
30. With the data in the given figure, △GHK ≅ △GIJ by which property ?



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

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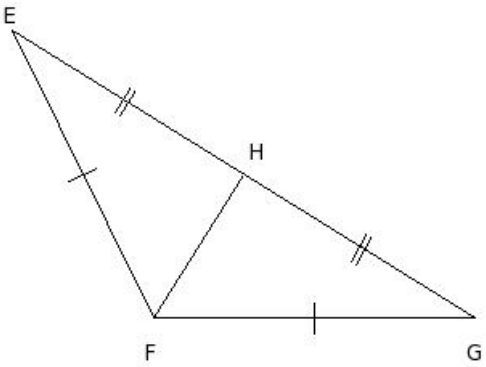
31. In the given figure, △EFG is an obtuse angled triangle. △EFH ≅ △GFH by which property ?



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

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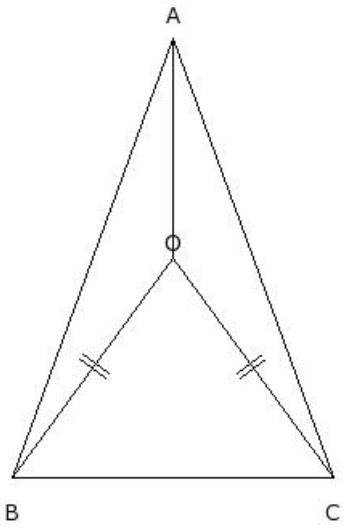
32. With the data in the given figure, △AOB ≅ △AOC by which property ?



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

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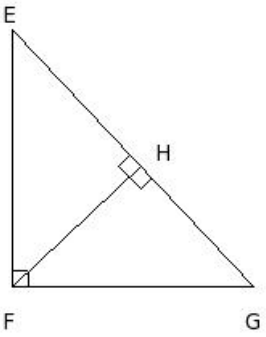
33. With the data in the figure, △EHF ≅ △GHF by which property ?



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

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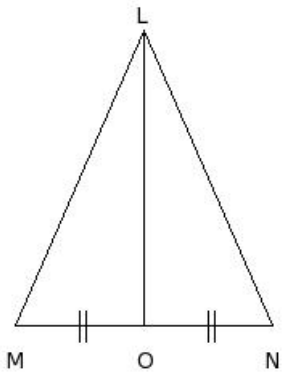
34. With the data in the figure, △LOM ≅ △LON by which property ?



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

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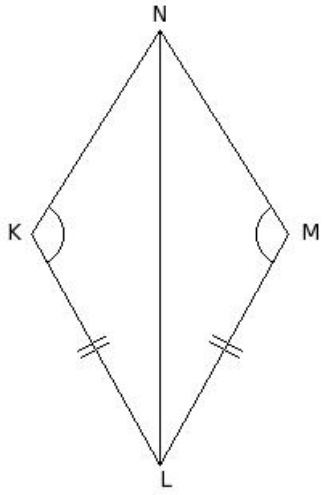
35. With the data in the figure, △KNL ≅ △MNL by which property ?



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

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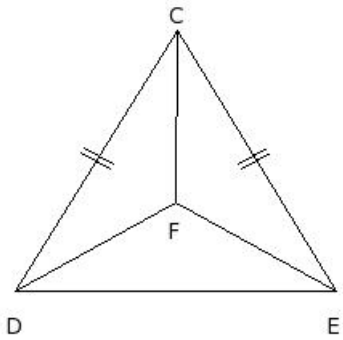
36. With the data in the figure, △CDF ≅ △CEF by which property ?



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

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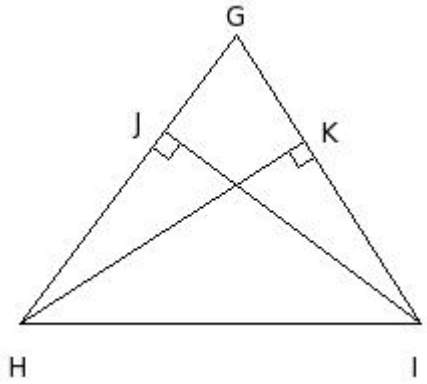
37. With the data in the figure, △HKI ≅ △IJH by which property ?



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

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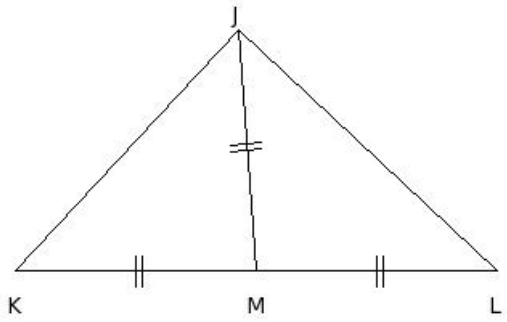
38. With the data in the figure, △JMK ≅ △JML by which property ?



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

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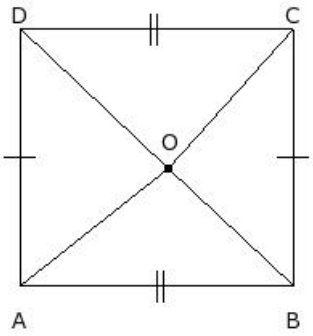
39. With the data in the figure, △AOB ≅ △DOC by which property ?



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

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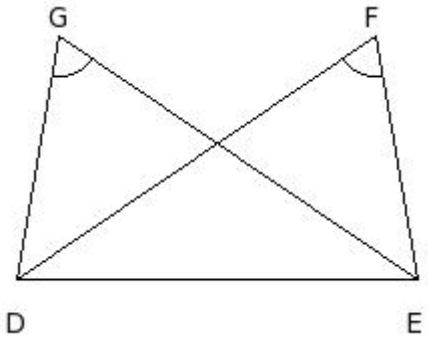
40. With the data in the figure, △DEG ≅ △EDF by which property ?



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

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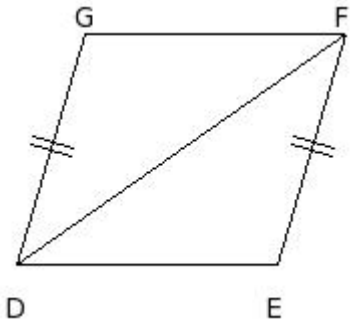
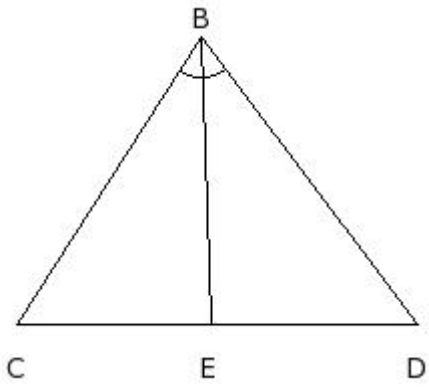
41. With the data in the figure, △DFG ≅ △FDE by which property ?



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

---

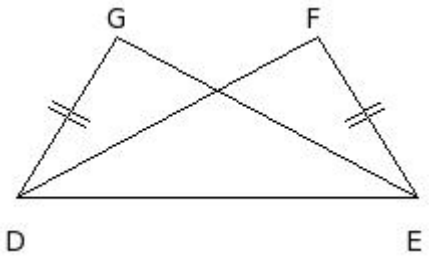
42. With the data in the figure, △BEC ≅ △BED by which property ?



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

---

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



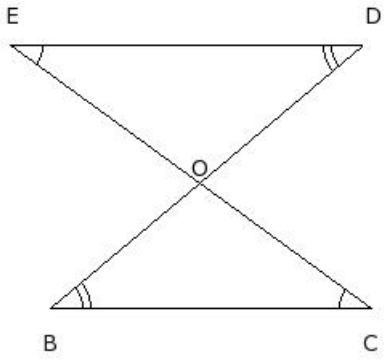
(i) SAS Congruency
(ii) not congruent
(iii) RHS Congruency

(iv) ASA Congruency

(v) SSS Congruency

---

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



(i) SSS Congruency

(ii) RHS Congruency

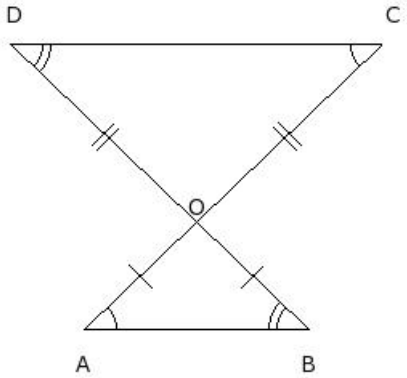
(iii) SAS Congruency

(iv) ASA Congruency

(v) not congruent

---

45. With the data in the figure, △AOB ≅ △COD by which property ?



(i) SAS Congruency

(ii) ASA Congruency

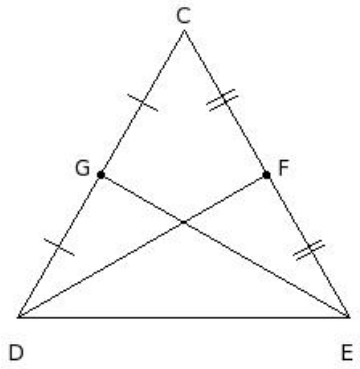
(iii) SSS Congruency

(iv) not congruent

(v) RHS Congruency

---

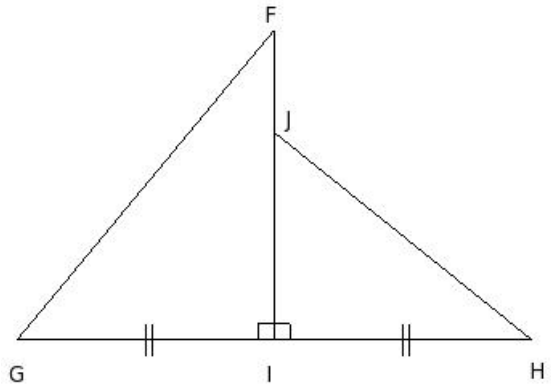
46. With the data in the figure, △DEG ≅ △EDF by which property ?



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

---

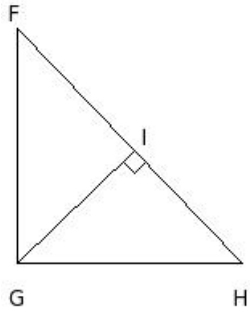
47. With the data in the figure, △FGI ≅ △JHI by which property ?



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

---

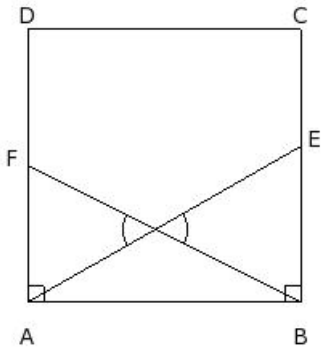
48. With the data in the figure, △FGI ≅ △HGI by which property ?



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

---

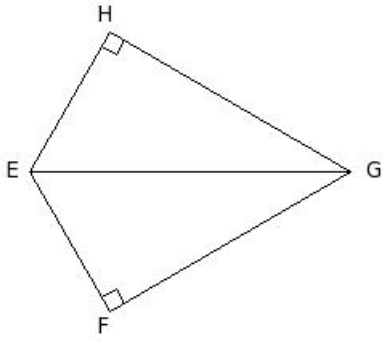
49. With the data in the figure, △ABE ≅ △BAF by which property ?



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

---

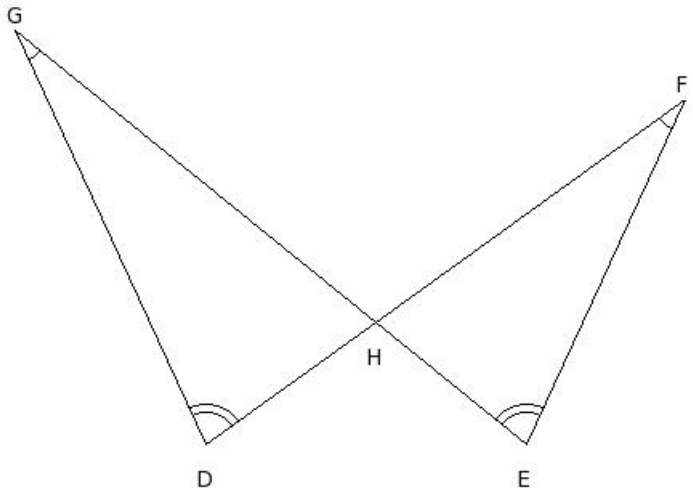
50. With the data in the figure, △EGH ≅ △EGF by which property ?



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

---

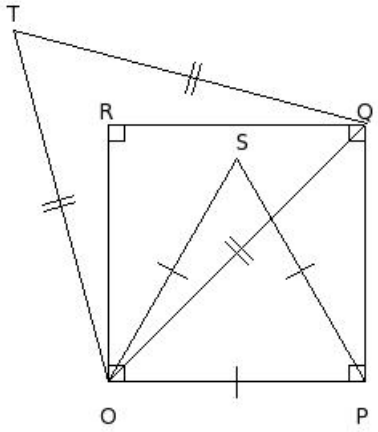
51. With the data in the figure, △DHG ≅ △EHF by which property ?



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

---

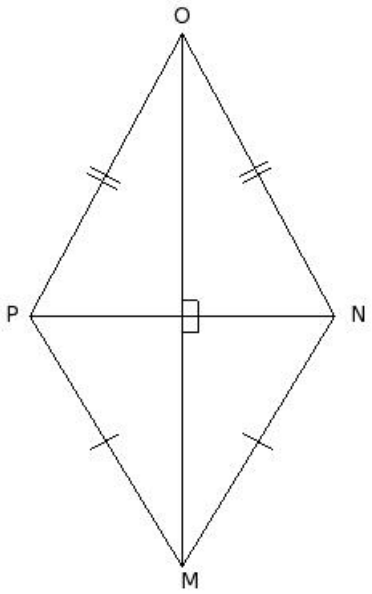
52. With the data in the figure, △OPS ≅ △OQT by which property ?



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

---

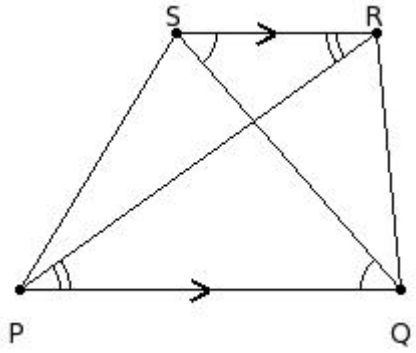
53. With the data in the given figure, △MNP ≅ △ONP by which property ?



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

---

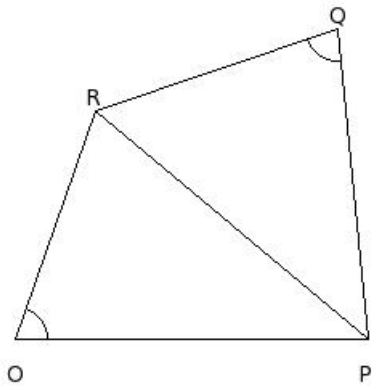
54. With the data in the given figure, △PQS ≅ △QPR by which property ?



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

---

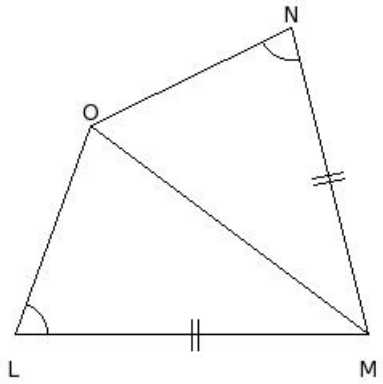
55. With the data in the given figure, △OPR ≅ △QRP by which property ?



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

---

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



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

---

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

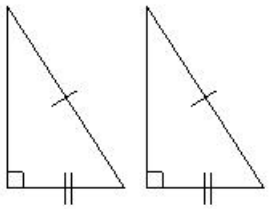


fig 3

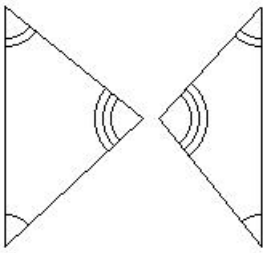


fig 4

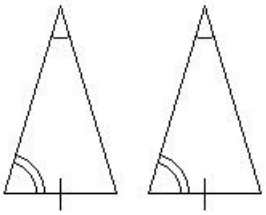


fig 1

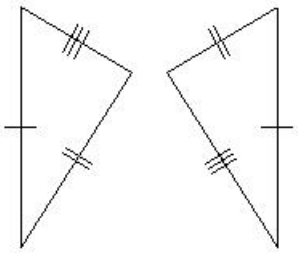


fig 2

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

---

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

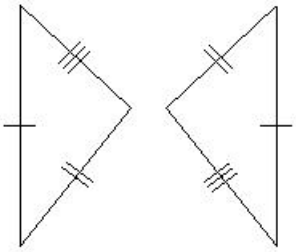


fig 3

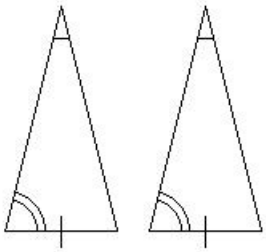


fig 4

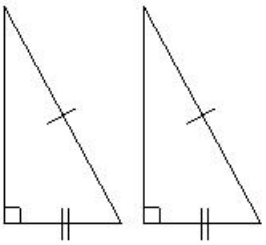


fig 1

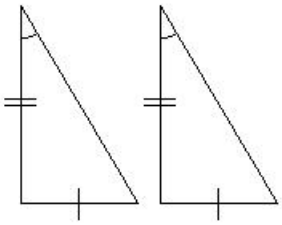


fig 2

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

---

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

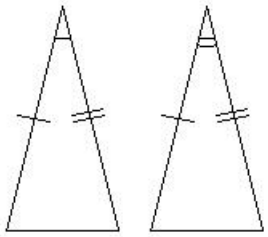


fig 3

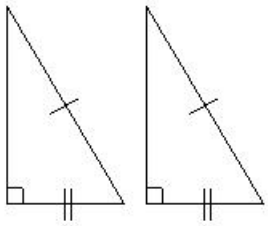


fig 4

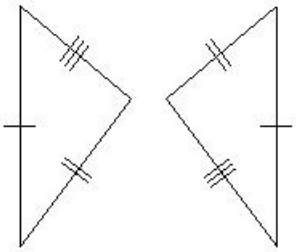


fig 1

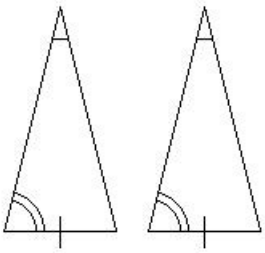


fig 2

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

Assignment Key

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

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