EduSahara™ Learning Center Assignment

Grade : Class VIII, ICSE
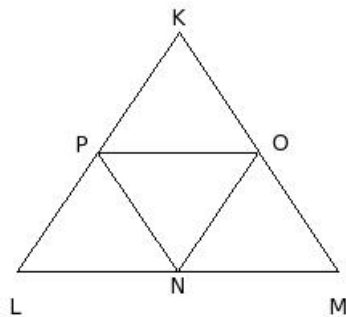**Chapter** : Triangles
Name : Congruency of Triangles
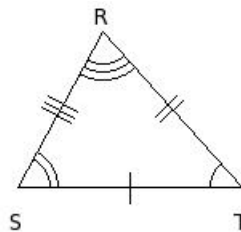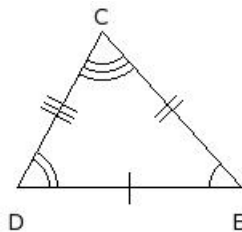**Licensed To** : Teachers and Students for non−commercial use

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1. In the given figure, points N , O and P are the mid-points of sides LM, MK and KL of △KLM. Which of the following are true?

   a) △PLN ≅ △NOP

   b) △PLN ≅ △KPO

   c) △KPO ≅ △ONM

   d) △KPO ≅ △NPO

   e) △KPO ≅ △NOP

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

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

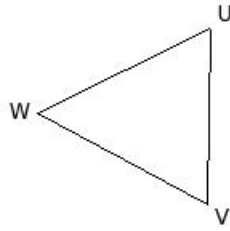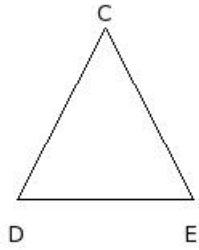
   (i)   △CDE ≅ △TSR

   (ii) △CDE ≅ △STR

   (iii) △CDE ≅ △TRS

   (iv) △CDE ≅ △RST

   (v) △DEC ≅ △RST

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3. In the given figure, △CDE ≅ △WVU. Which of the following are true ?

   a) DE = WV

   b) ∠C = ∠U

   c) ∠E = ∠U

   d) DE = VU

e) ∠D = ∠V

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

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4. In the given figure, △EFG ≅ △TSR. Which of the following are true ?

    a) ∠S = 53°
    b) ∠S = 48°
    c) ∠R = 79°
    d) ∠R = 48°
    e) ∠T = 53°
    f) ∠T = 79°
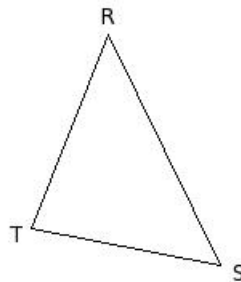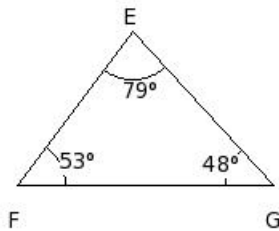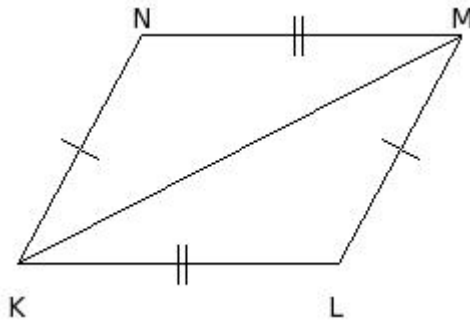

(i) {a,d,f} (ii) {c,d} (iii) {c,a,d} (iv) {e,b,f} (v) {b,a}

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5. In the given figure, △CDE ≅ △QRS. Which of the following are true ?

    a) SQ = 13 cm
    b) RS = 13 cm
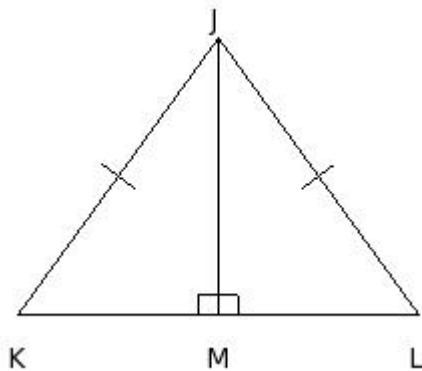   c) SQ = 14 cm
    d) RS = 15 cm
    e) QR = 15 cm
    f) QR = 13 cm
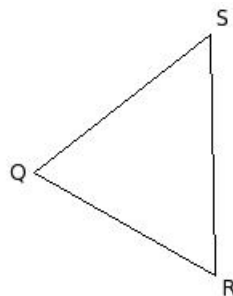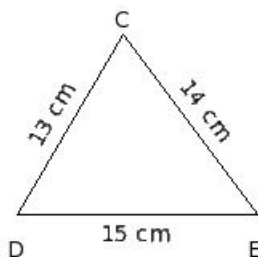
(i) {b,d} (ii) {e,a,f} (iii) {b,c,d} (iv) {a,c} (v) {c,d,f}

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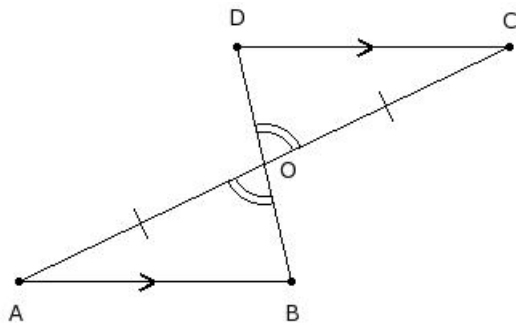

(i)   △KMN ≅ △KML
(ii) △KMN ≅ △KLM
(iii) △KNM ≅ △LMK
(iv) △KMN ≅ △MKL
(v)   △KNM ≅ △KLM

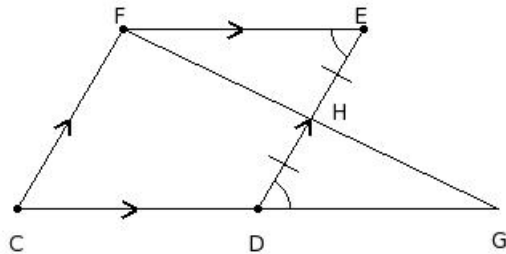7. With the data in the given figure, △JKM ≅ △JLM by which property ?

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

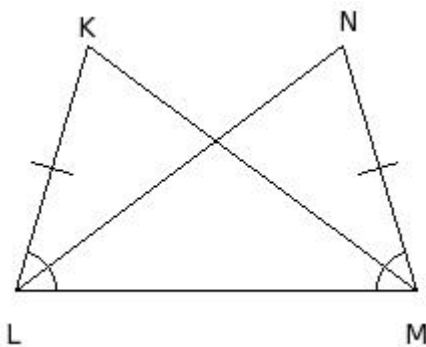8. With the data in the given figure, △ODC ≅ △OBA by which property ?

(i)　SAS Congruency

(ii)　SSS Congruency

(iii) RHS Congruency

(iv) not congruent

(v)　ASA Congruency

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

(i)　ASA Congruency

(ii)　not congruent

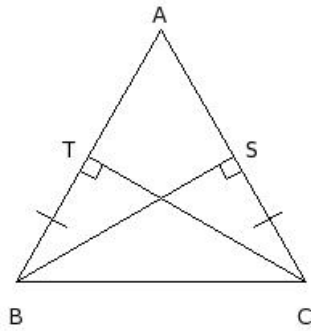(iii) RHS Congruency

(iv) SSS Congruency

(v)　SAS Congruency

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10. With the given data in the figure, △KLM ≅ △NML by which property ?

(i)　RHS Congruency
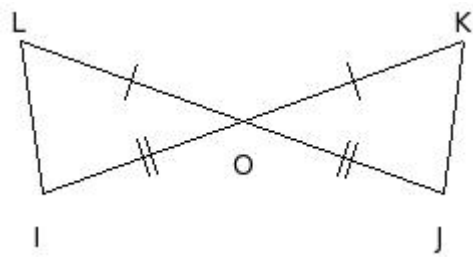
(ii)　ASA Congruency

(iii) SSS Congruency

(iv) SAS Congruency

(v) not congruent

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11. With the given data in the figure, △TBC ≅ △SCB by which property ?

    (i)   SAS Congruency

    (ii) RHS Congruency

    (iii) not congruent

    (iv) ASA Congruency

    (v) SSS Congruency

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12. With the data in the given figure, △ILO ≅ △JKO by which property ?

    (i)   ASA Congruency

    (ii) not congruent

    (iii) SAS Congruency

    (iv) SSS Congruency

    (v) RHS Congruency

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13. With the data in the given figure, △ILK ≅ △IJK by which property ?

(i)   not congruent

(ii) SAS Congruency

(iii) RHS Congruency

(iv) ASA Congruency

(v) SSS Congruency

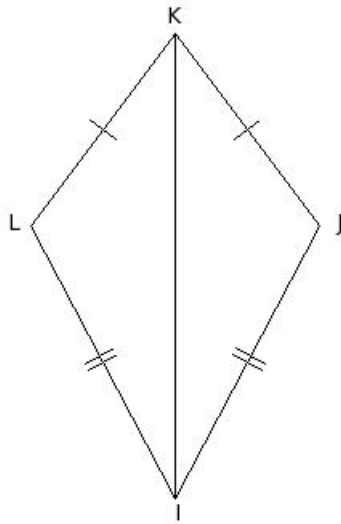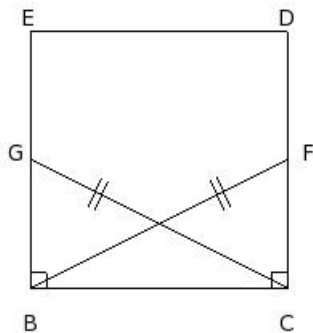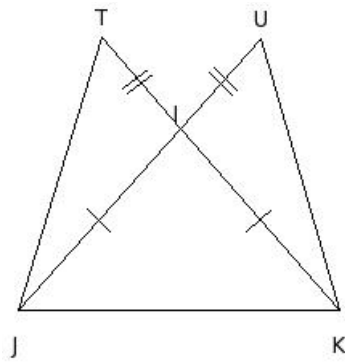14. With the data in the given figure, △GBC ≅ △FCB by which property ?
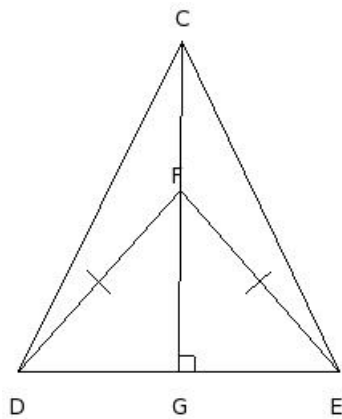

(i)   RHS Congruency

(ii) SAS Congruency

(iii) not congruent

(iv) ASA Congruency

(v) SSS Congruency

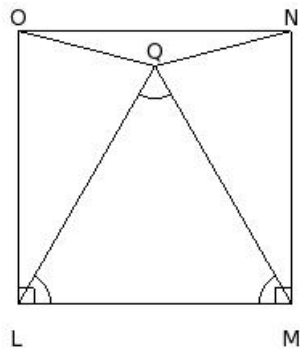15. With the data in the given figure, △TJK ≅ △UKJ by which property ?

(i)　ASA Congruency

(ii)　RHS Congruency

(iii) not congruent

(iv) SSS Congruency

(v)　SAS Congruency

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16. In the given figure, △FDE is an isosceles triangle. CG ⊥ DE passing through F. △CFD ≅ △CFE by which property ?
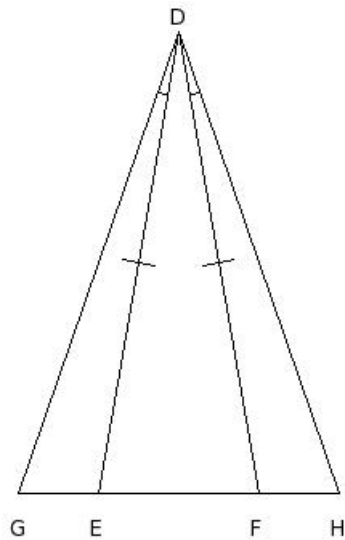

(i)　ASA Congruency

(ii)　SSS Congruency

(iii) SAS Congruency

(iv) not congruent

(v)　RHS Congruency

17. In the given figure, LMNO is a square and △QLM is an equilateral triangle. △QOL ≅ △QNM by which property ?

(i)   ASA Congruency

(ii) not congruent

(iii) RHS Congruency

(iv) SAS Congruency

(v) SSS Congruency

18. With the data in the given figure, △DEG ≅ △DFH by which property ?
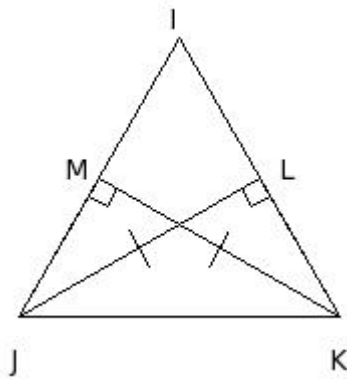

(i)   RHS Congruency

(ii) ASA Congruency

(iii) SAS Congruency

(iv) not congruent

(v) SSS Congruency

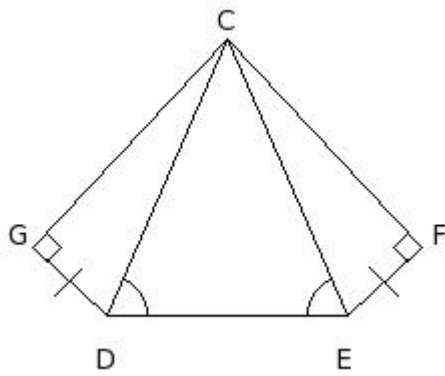19. With the data in the given figure, △ADB ≅ △ADC by which property ?
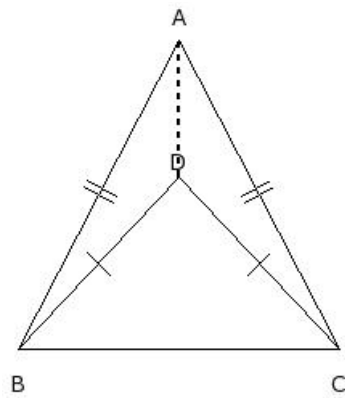
(i)   not congruent

(ii) SAS Congruency

(iii) RHS Congruency

(iv) ASA Congruency

(v) SSS Congruency

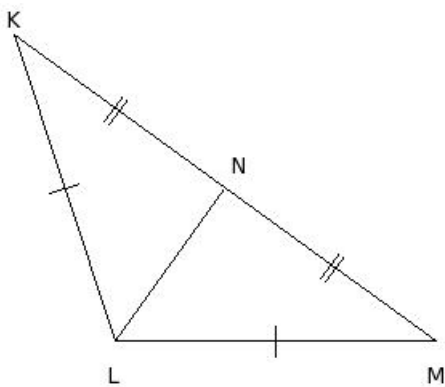20. With the data in the given figure, △JLK ≅ △KMJ by which property ?

(i)   RHS Congruency

(ii) not congruent

(iii) SAS Congruency

(iv) ASA Congruency

(v) SSS Congruency

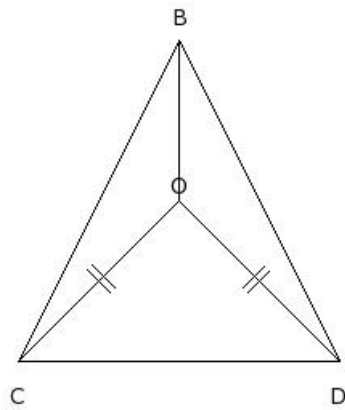21. With the data in the given figure, △CDG ≅ △CEF by which property ?

(i)   SAS Congruency

(ii) ASA Congruency

(iii) not congruent

(iv) RHS Congruency

(v) SSS Congruency

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22. In the given figure, $\triangle$KLM is an obtuse angled triangle. $\triangle$KLN $\cong$ $\triangle$MLN by which property ?
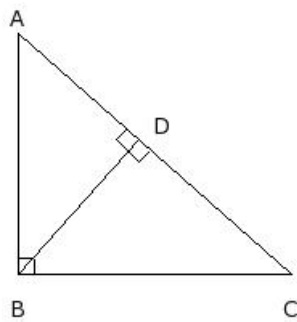

(i)   SSS Congruency

(ii) SAS Congruency

(iii) ASA Congruency

(iv) not congruent

(v) RHS Congruency

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23. With the data in the given figure, $\triangle$BOC $\cong$ $\triangle$BOD by which property ?
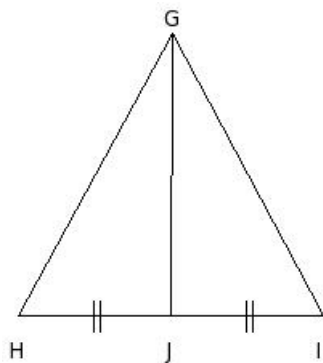
(i) SAS Congruency

(ii) ASA Congruency

(iii) not congruent

(iv) RHS Congruency

(v) SSS Congruency

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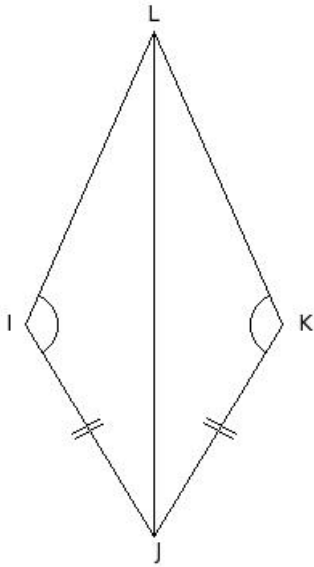

(i) SAS Congruency

(ii) SSS Congruency

(iii) RHS Congruency

(iv) ASA Congruency

(v) not congruent

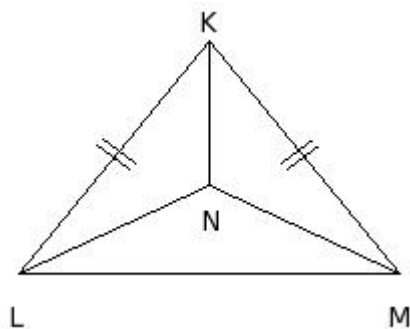25. With the data in the figure, △GJH ≅ △GJI by which property ?

(i) RHS Congruency

(ii) SSS Congruency

(iii) not congruent

(iv) SAS Congruency

(v) ASA Congruency

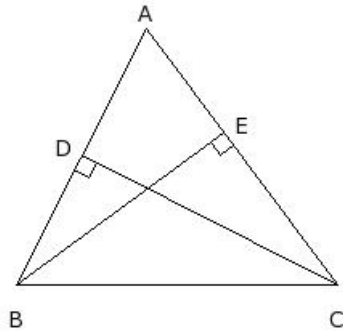26. With the data in the figure, △ILJ ≅ △KLJ by which property ?

(i) ASA Congruency

(ii) not congruent

(iii) SAS Congruency

(iv) SSS Congruency

(v) RHS Congruency

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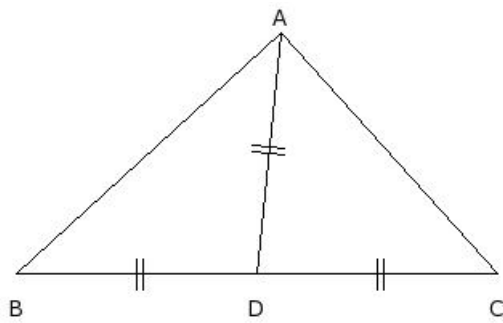

(i) SSS Congruency

(ii) not congruent

(iii) ASA Congruency

(iv) SAS Congruency

(v) RHS Congruency

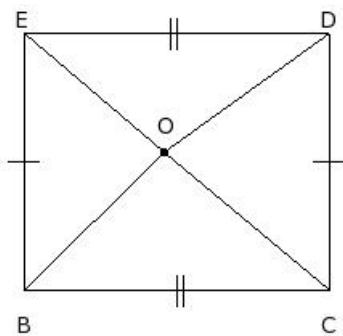28. With the data in the figure, △BEC ≅ △CDB by which property ?

   (i) SAS Congruency

   (ii) ASA Congruency

   (iii) RHS Congruency

   (iv) not congruent

   (v) SSS Congruency

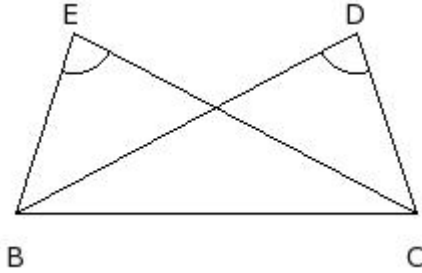29. With the data in the figure, △ADB ≅ △ADC by which property ?

   (i) SAS Congruency

   (ii) not congruent

   (iii) ASA Congruency

   (iv) SSS Congruency

   (v) RHS Congruency

30. With the data in the figure, △BOC ≅ △EOD by which property ?
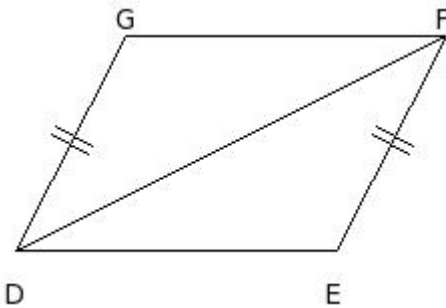
    (i)   not congruent

    (ii) ASA Congruency

    (iii) SSS Congruency

    (iv) RHS Congruency

    (v) SAS Congruency

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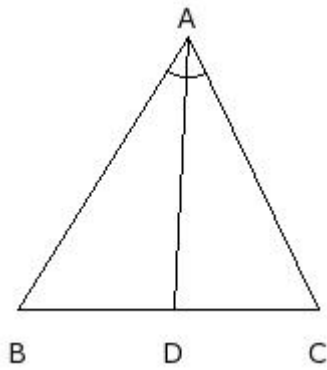

    (i)   not congruent

    (ii) SSS Congruency

    (iii) SAS Congruency

    (iv) ASA Congruency

    (v) RHS Congruency

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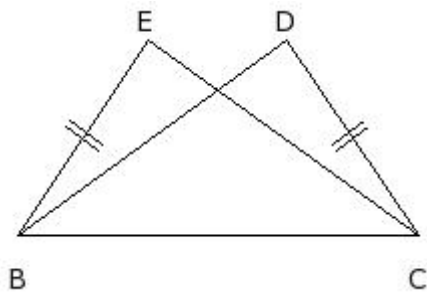

    (i)   SAS Congruency

    (ii) ASA Congruency

    (iii) RHS Congruency

    (iv) not congruent

    (v) SSS Congruency

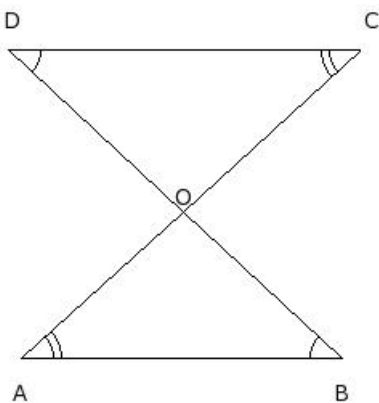33. With the data in the figure, △ADB ≅ △ADC by which property ?

(i)   RHS Congruency

(ii) SSS Congruency

(iii) SAS Congruency

(iv) not congruent

(v) ASA Congruency

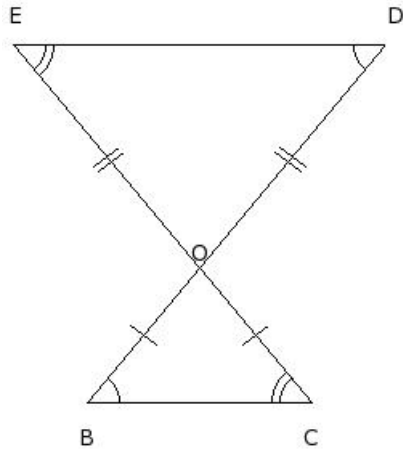34. With the data in the figure, △BEC ≅ △CDB by which property ?

(i)   RHS Congruency

(ii) SAS Congruency

(iii) not congruent

(iv) SSS Congruency

(v) ASA Congruency

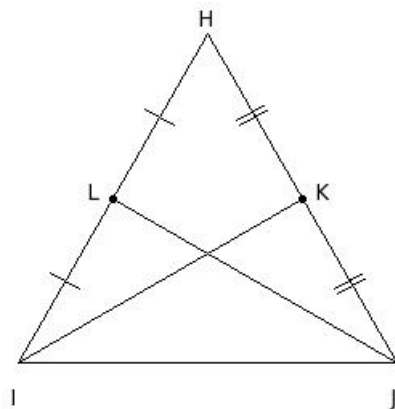35. With the data in the figure, △AOB ≅ △COD by which property ?

(i)   SSS Congruency

(ii) not congruent

(iii) RHS Congruency

(iv) SAS Congruency

(v) ASA Congruency

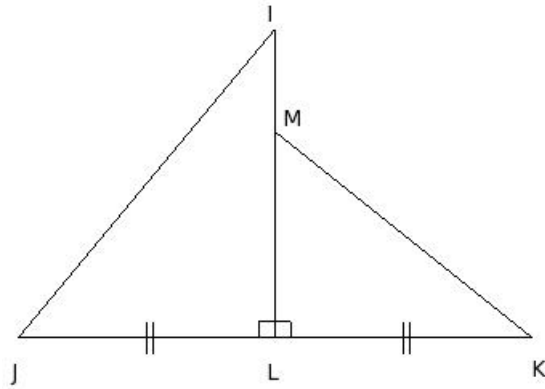36. With the data in the figure, △BOC ≅ △DOE by which property ?

(i)   SAS Congruency

(ii) not congruent

(iii) RHS Congruency

(iv) ASA Congruency

(v) SSS Congruency

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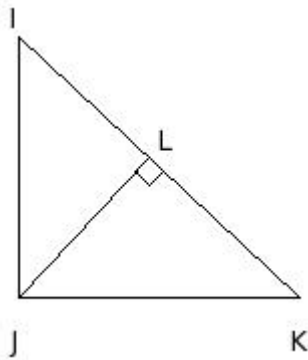

(i)   RHS Congruency

(ii) SSS Congruency

(iii) not congruent

(iv) ASA Congruency

(v) SAS Congruency

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38. With the data in the figure, △IJL ≅ △MKL by which property ?
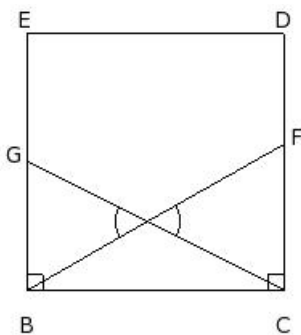

   (i)   ASA Congruency
   (ii) SSS Congruency
   (iii) not congruent
   (iv) SAS Congruency
   (v)   RHS Congruency

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39. With the data in the figure, △IJL ≅ △KJL by which property ?
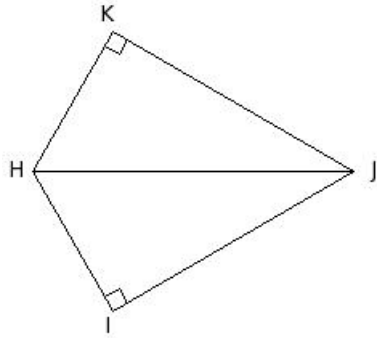

   (i)   SAS Congruency
   (ii) ASA Congruency
   (iii) SSS Congruency
   (iv) not congruent
   (v)   RHS Congruency

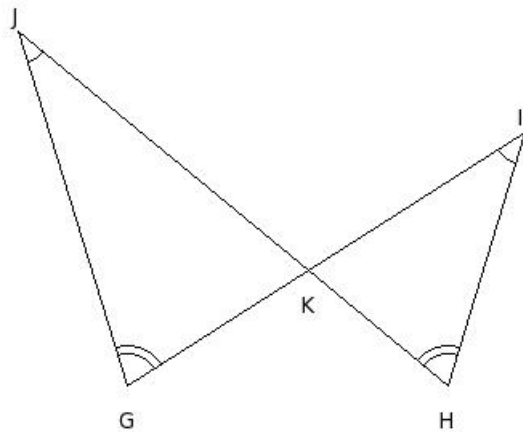
40. With the data in the figure, △BCF ≅ △CBG by which property ?

(i) SAS Congruency

(ii) ASA Congruency

(iii) not congruent

(iv) RHS Congruency

(v) SSS Congruency

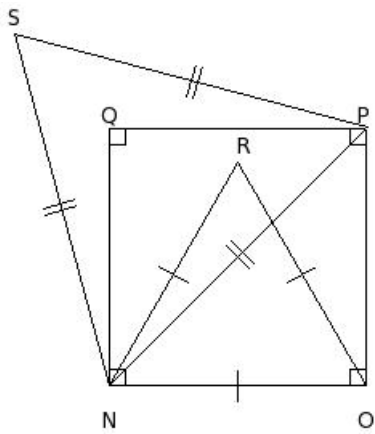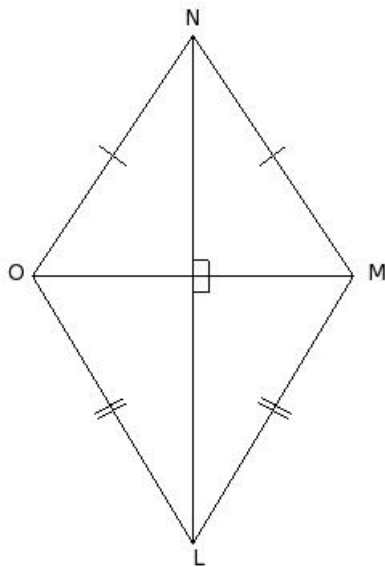41. With the data in the figure, △HJK ≅ △HJI by which property ?

(i) SAS Congruency

(ii) SSS Congruency

(iii) ASA Congruency

(iv) RHS Congruency

(v) not congruent

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42. With the data in the figure, △GKJ ≅ △HKI by which property ?

(i) SAS Congruency

(ii) ASA Congruency

(iii) not congruent

(iv) RHS Congruency

(v) SSS Congruency

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43. With the data in the figure, △NOR ≅ △NPS by which property ?
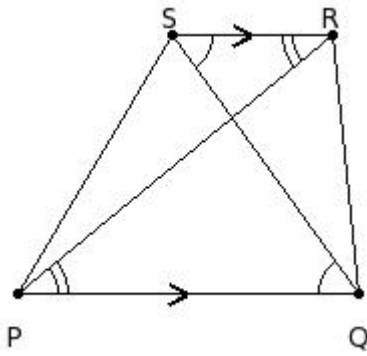
(i) SSS Congruency

(ii) not congruent

(iii) SAS Congruency

(iv) ASA Congruency

(v) RHS Congruency

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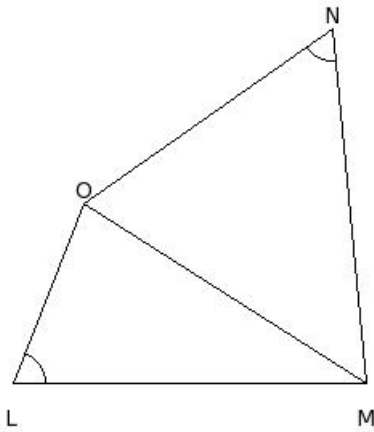

(i) RHS Congruency

(ii) ASA Congruency

(iii) not congruent

(iv) SAS Congruency

(v) SSS Congruency

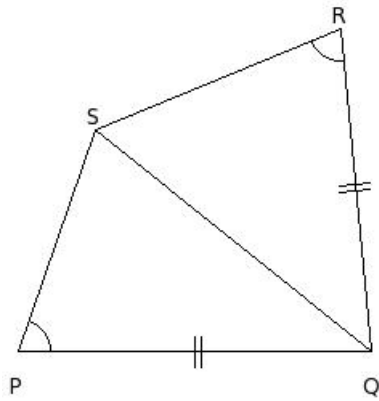45. With the data in the given figure, △PQS ≅ △QPR by which property ?

(i) SAS Congruency

(ii) ASA Congruency

(iii) SSS Congruency

(iv) RHS Congruency

(v) not congruent

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

(i) not congruent

(ii) RHS Congruency

(iii) SSS Congruency

(iv) ASA Congruency

(v) SAS Congruency

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

(i) RHS Congruency

(ii) not congruent

(iii) SSS Congruency

(iv) ASA Congruency

(v) SAS Congruency

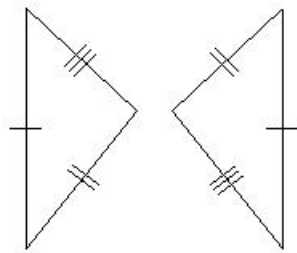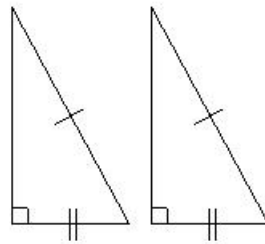48. In the given figure, which pair of triangles are not congruent ?
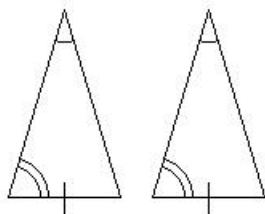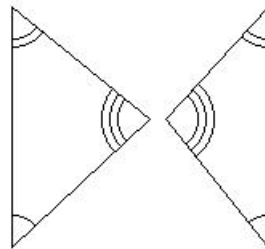

fig 3

fig 4

fig 1

fig 2

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

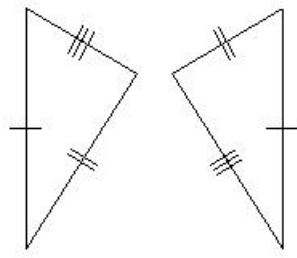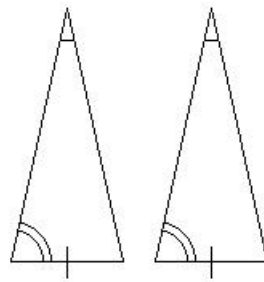49. In the given figure, which pair of triangles are not congruent ?
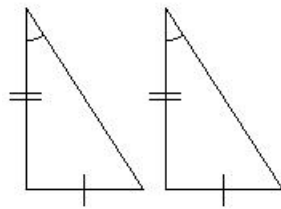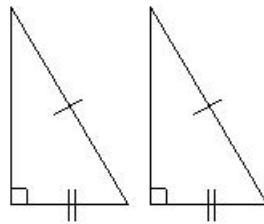
fig 3

fig 4

fig 1

fig 2

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

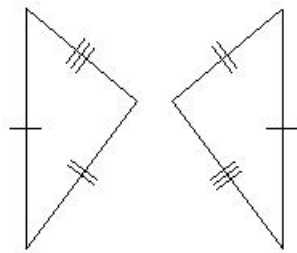50. In the given figure, which pair of triangles are not congruent ?

fig 3
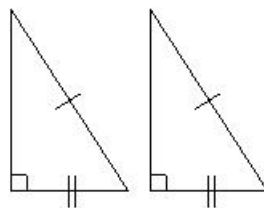

fig 4

fig 1
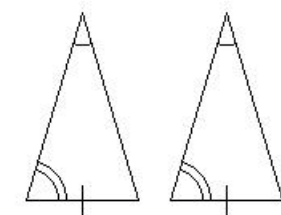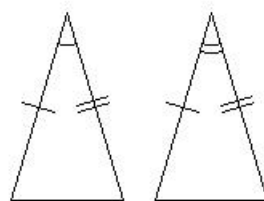

fig 2

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

Assignment Key

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

40) (iii)
41) (v)
42) (iii)
43) (ii)
44) (iii)
45) (v)
46) (i)
47) (ii)
48) (iii)
49) (iv)
50) (iii)