EduSahara™ Worksheet

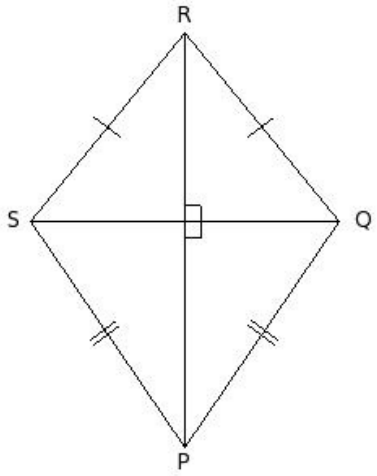
Name : Chapter Based Worksheet

Chapter : Congruency of Triangles

Grade : ICSE Grade VII

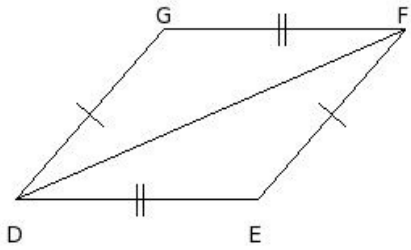


1. With the data in the given figure, △PQS ≅ △RQS by which property?



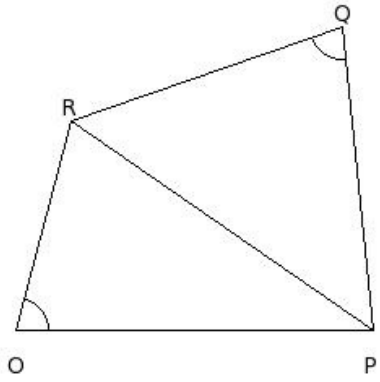

(i) not congruent (ii) RHS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) SSS Congruency

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




(i) △DGF ≅ △EFD (ii) △DFG ≅ △FDE (iii) △DGF ≅ △DEF (iv) △DFG ≅ △DEF (v) △DFG ≅ △DFE

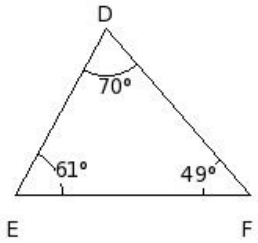
3. With the data in the given figure, △OPR ≅ △QRP by which property?

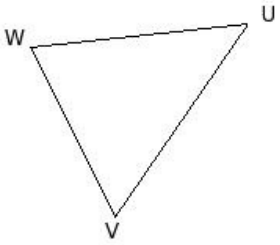



(i) ASA Congruency (ii) not congruent (iii) SAS Congruency (iv) SSS Congruency (v) RHS Congruency

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

a) ∠V = 61°
b) ∠U = 49°
c) ∠U = 70°
d) ∠W = 70°
e) ∠W = 61°
f) ∠V = 49°




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

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

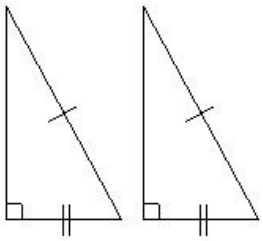


fig 3

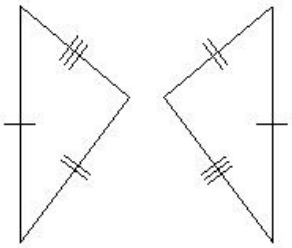


fig 4

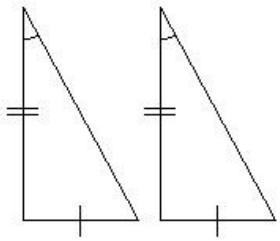


fig 1

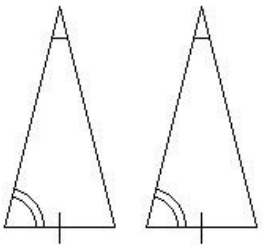
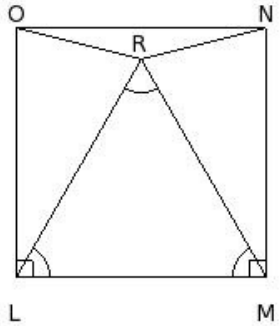


fig 2

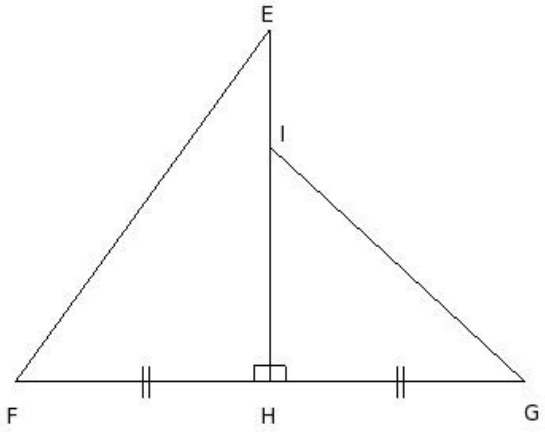
(i) fig 4 (ii) fig 2 (iii) fig 1 (iv) fig 3

6. In the given figure, LMNO is a square and △RLM is an equilateral triangle. △ROL ≅ △RNM by which property?



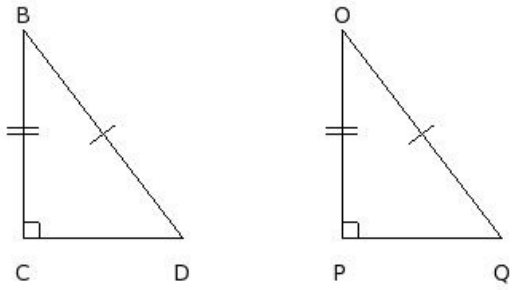

(i) SSS Congruency (ii) not congruent (iii) ASA Congruency (iv) SAS Congruency (v) RHS Congruency

7. With the data in the figure, △EFH ≅ △IGH by which property?



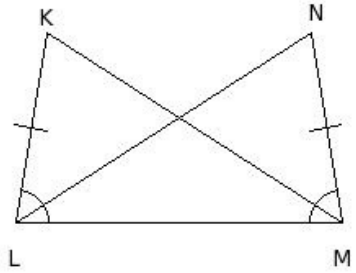

(i) SAS Congruency (ii) not congruent (iii) RHS Congruency (iv) SSS Congruency (v) ASA Congruency

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



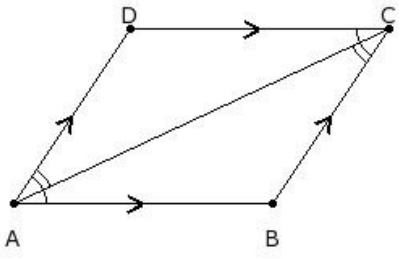

(i) SAS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) SSS Congruency

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




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

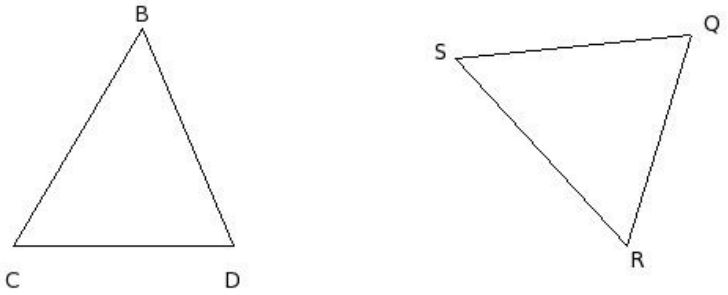
10. With the given data in the figure, △ABC ≅ △CDA by which property?




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

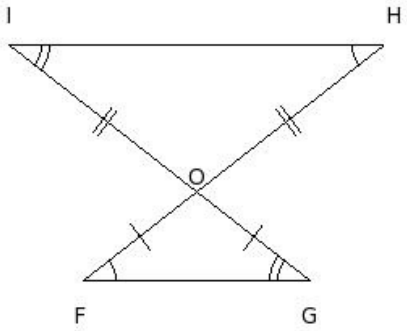
11. In the given figure, △BCD ≅ △SRQ. Which of the following are true?

a) ∠D = ∠Q
b) CD = RQ
c) CD = SR
d) ∠B = ∠Q
e) ∠C = ∠R



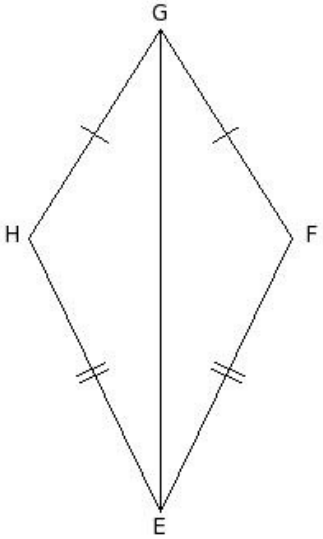

(i) {c,d,e} (ii) {a,b,e} (iii) {d,b} (iv) {c,a,b} (v) {c,a}

12. With the data in the figure, △FOG ≅ △HOI by which property?




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

13. With the data in the given figure, △EHG ≅ △EFG by which property?



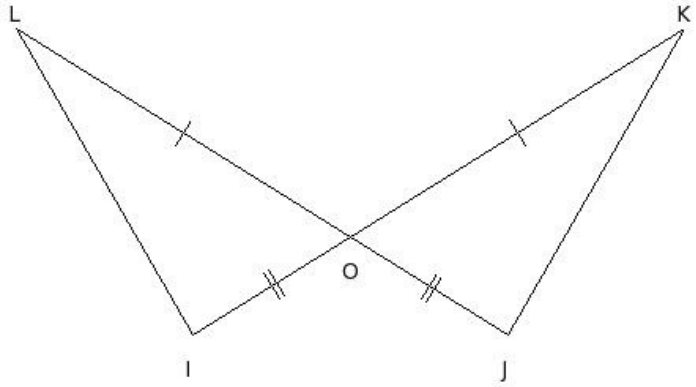

(i) ASA Congruency (ii) not congruent (iii) RHS Congruency (iv) SSS Congruency (v) SAS Congruency

14. Which of the following are true?

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

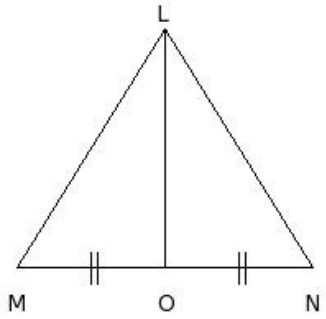
(i) {a,c} (ii) {e,b,a} (iii) {d,c,a} (iv) {b,a} (v) {d,c}

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



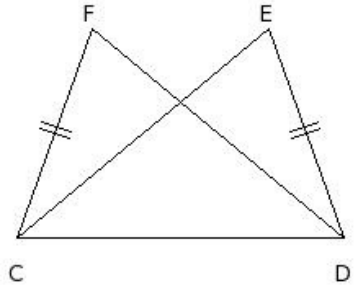

(i) SSS Congruency (ii) not congruent (iii) ASA Congruency (iv) RHS Congruency (v) SAS Congruency

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



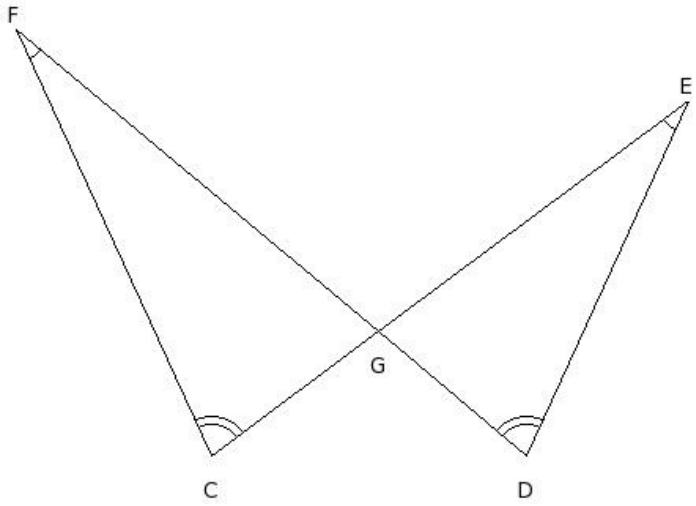

(i) not congruent (ii) ASA Congruency (iii) RHS Congruency (iv) SSS Congruency (v) SAS Congruency

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



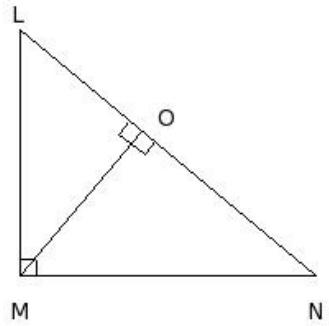

(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

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



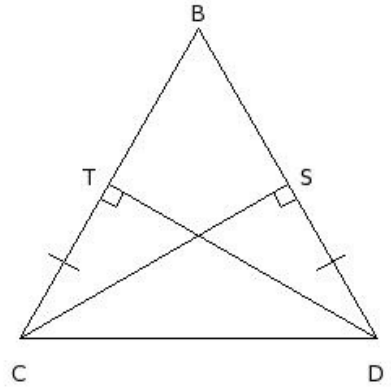

(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) SAS Congruency (v) ASA Congruency

19. With the data in the figure, △LOM ≅ △NOM by which property?




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

20. With the given data in the figure, △TCD ≅ △SDC by which property?



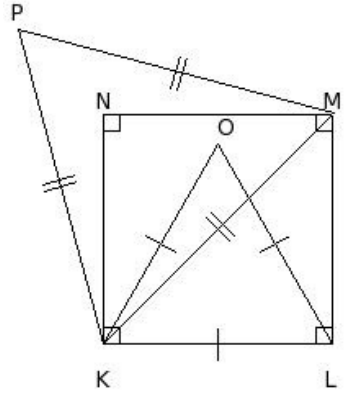

(i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) SSS Congruency (v) not congruent

21. Which of the following are true?

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

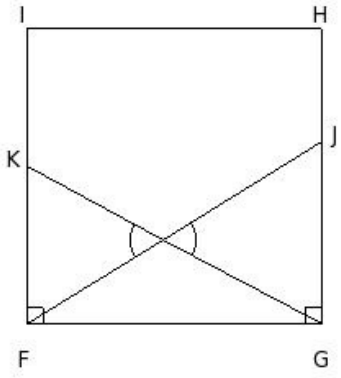
(i) {c,a,b} (ii) {c,d,e} (iii) {d,b} (iv) {c,a} (v) {a,b,e}

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



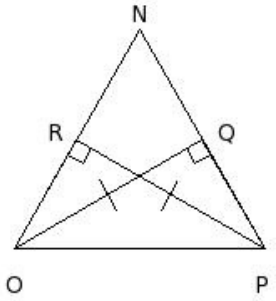

(i) not congruent (ii) SSS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) RHS Congruency

23. With the data in the figure, △FGJ ≅ △GFK by which property?



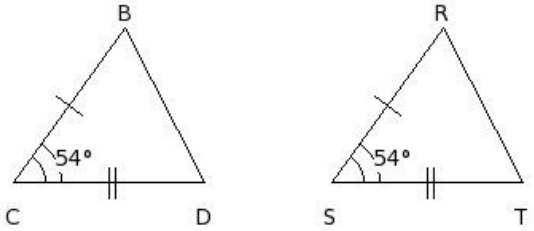

(i) ASA Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) SAS Congruency (v) not congruent

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




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

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




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

## Assignment Key

| | | | | | |
|---|---|---|---|---|---|
| 1) (i) | 2) (ii) | 3) (ii) | 4) (iv) | 5) (iii) | 6) (iv) |
| 7) (ii) | 8) (iii) | 9) (iv) | 10) (i) | 11) (ii) | 12) (ii) |
| 13) (iv) | 14) (i) | 15) (v) | 16) (i) | 17) (ii) | 18) (ii) |
| 19) (v) | 20) (iii) | 21) (v) | 22) (i) | 23) (v) | 24) (iii) |
| 25) (iii) | | | | | |