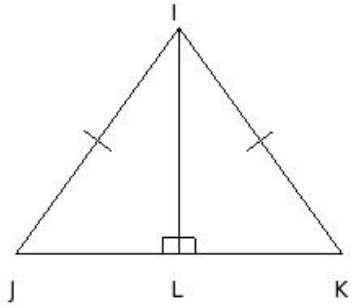
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Congruency of Triangles

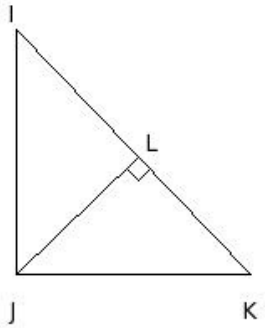
Grade : ICSE Grade VII

1. With the data in the given figure, △IJL ≅ △IKL by which property?



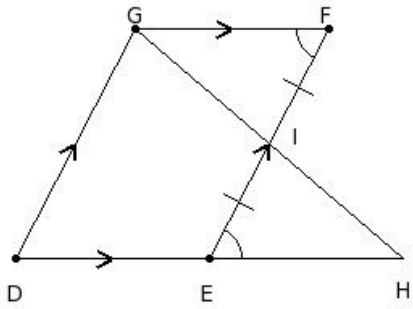
(i) not congruent (ii) SAS Congruency (iii) RHS Congruency (iv) ASA Congruency (v) SSS Congruency

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



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

3. With the given data in the figure, △GFI ≅ △HEI by which property?



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

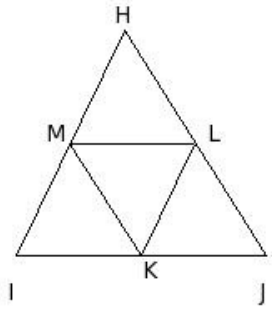
4. Which of the following are true?

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

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

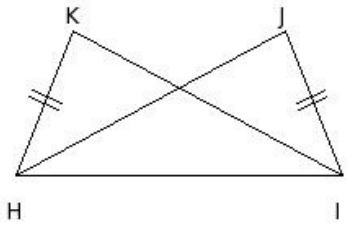
5. In the given figure, points K , L and M are the mid-points of sides IJ, JH and HI of △HIJ. Which of the following are true?

a) △MIK ≅ △HML
b) △HML ≅ △KML
c) △HML ≅ △LKJ
d) △MIK ≅ △KLM
e) △HML ≅ △KLM



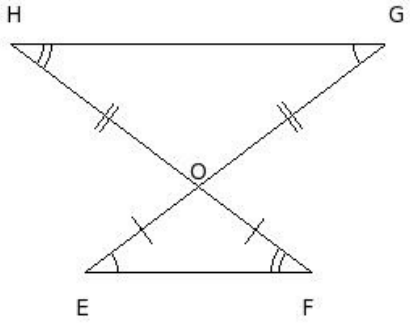
(i) {b,c} (ii) {a,c,d,e} (iii) {b,d} (iv) {b,e,a} (v) {b,a}

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



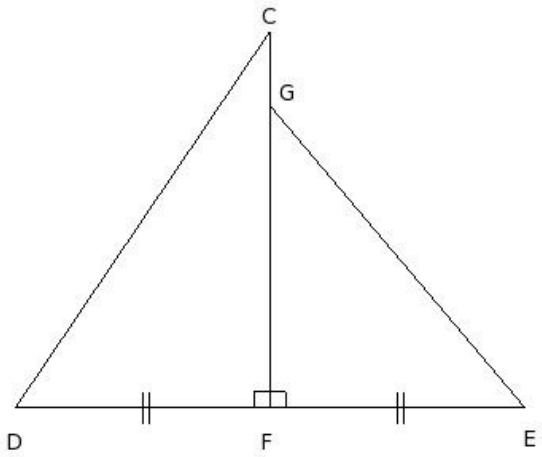
(i) SAS Congruency (ii) ASA Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

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



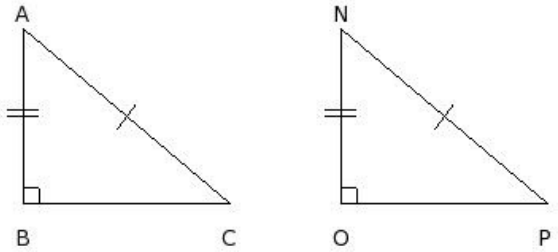
(i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) not congruent (v) SSS Congruency

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



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

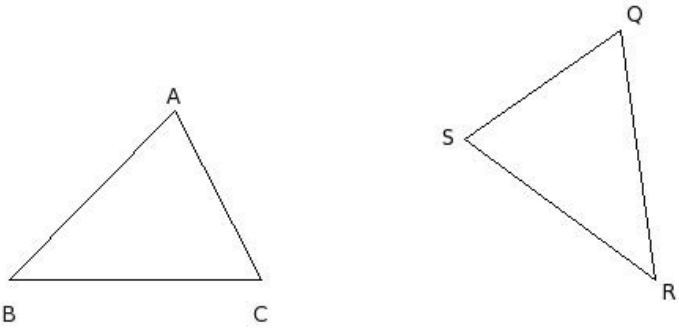
9. Identify the property by which the two given triangles are congruent



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

10. In the given figure, △ABC ≅ △SRQ. Which of the following are true?

a) BC = RQ
b) BC = SR
c) ∠B = ∠R
d) ∠A = ∠Q
e) ∠C = ∠Q



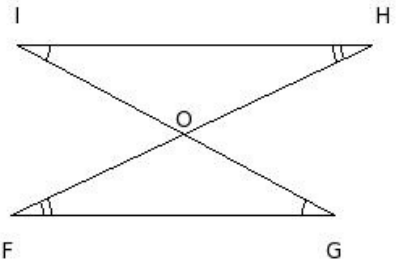
(i) {b,a} (ii) {b,a,c} (iii) {a,c,e} (iv) {b,d,e} (v) {d,c}

11. Which of the following are true?

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

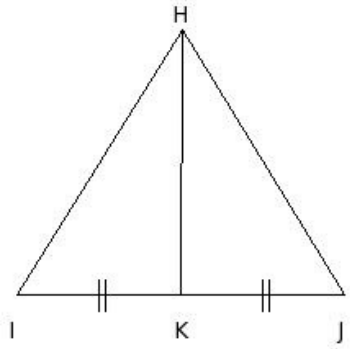
(i) {c,e} (ii) {a,c} (iii) {a,e,c} (iv) {d,f,c} (v) {b,e}

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



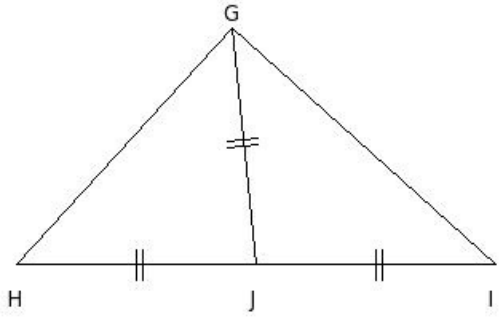
(i) ASA Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) RHS Congruency

13. With the data in the figure, △HKI ≅ △HKJ by which property?



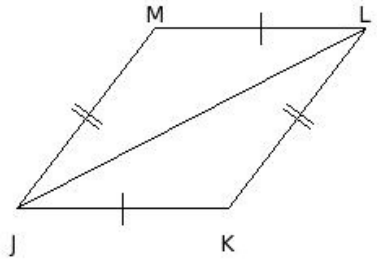
(i) SSS Congruency (ii) ASA Congruency (iii) not congruent (iv) RHS Congruency (v) SAS Congruency

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



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

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



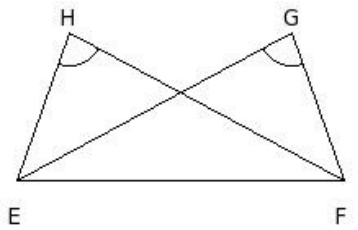
(i) △JLM ≅ △JLK (ii) △JLM ≅ △JKL (iii) △JLM ≅ △LJK (iv) △JML ≅ △JKL (v) △JML ≅ △KLJ

16. Which of the following are true?

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

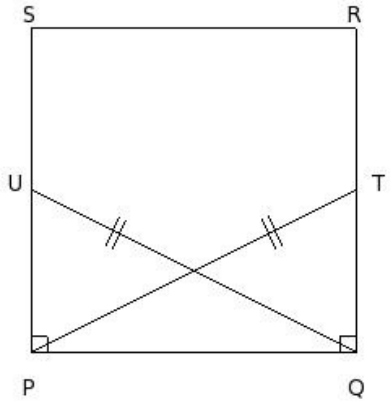
(i) {b,d} (ii) {b,d,c} (iii) {a,c} (iv) {c,d} (v) {e,a,c}

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



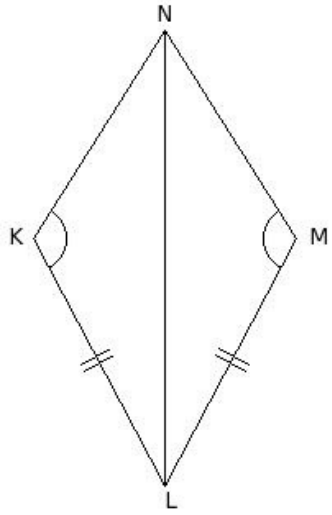
(i) ASA Congruency (ii) not congruent (iii) RHS Congruency (iv) SAS Congruency (v) SSS Congruency

18. With the data in the given figure, △UPQ ≅ △TQP by which property?



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

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



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

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

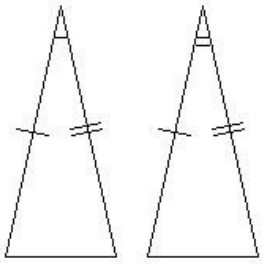


fig 3

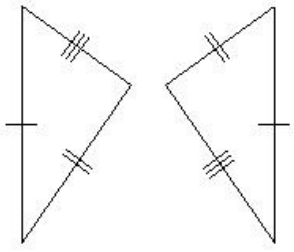


fig 4

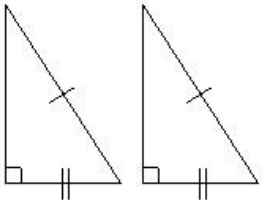


fig 1

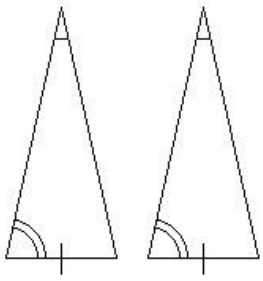
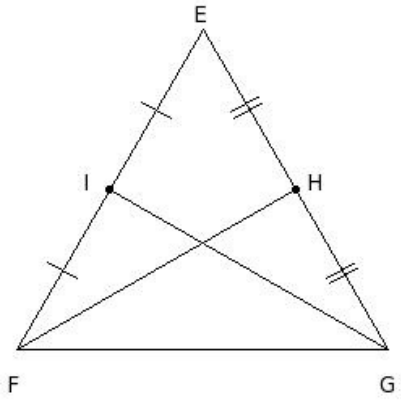


fig 2

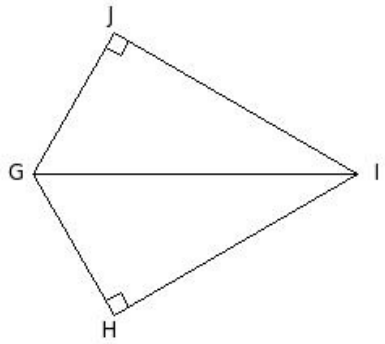
(i) fig 4 (ii) fig 2 (iii) fig 3 (iv) fig 1

21. With the data in the figure, △FGI ≅ △GFH by which property?



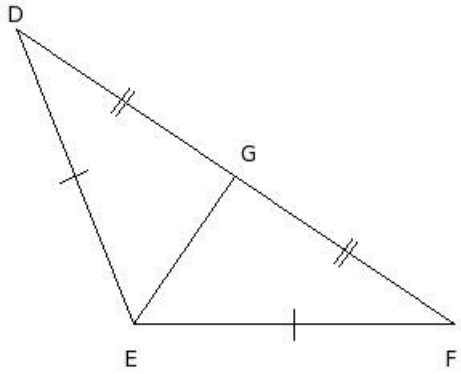
(i) SSS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) not congruent (v) SAS Congruency

22. With the data in the figure, △GIJ ≅ △GIH by which property?



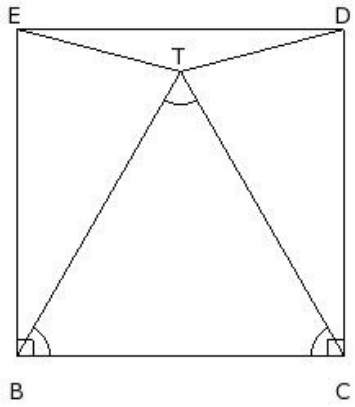
(i) RHS Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) ASA Congruency

23. In the given figure, △DEF is an obtuse angled triangle. △DEG ≅ △FEG by which property?



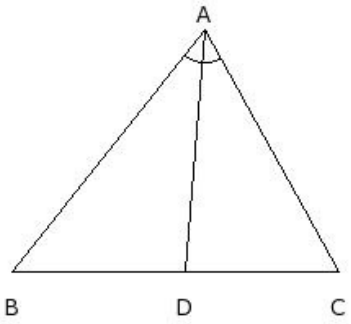
(i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency (v) not congruent

24. In the given figure, BCDE is a square and △TBC is an equilateral triangle. △TEB ≅ △TDC by which property?



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

25. With the data in the figure, $\triangle ADB \cong \triangle ADC$ by which property?



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

Assignment Key

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