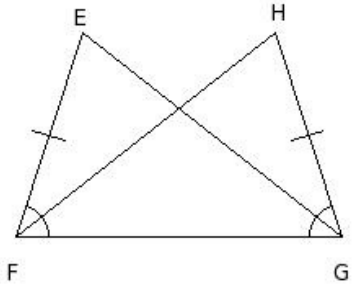
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Triangles

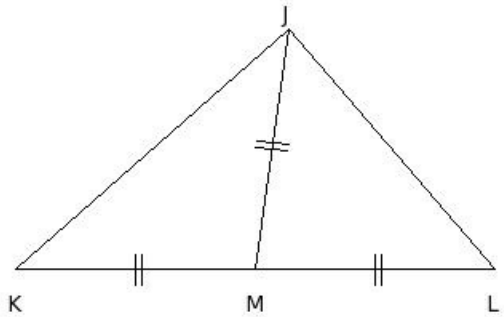
Grade : SSC Grade IX

1. With the given data in the figure, △EFG ≅ △HGF by which property?



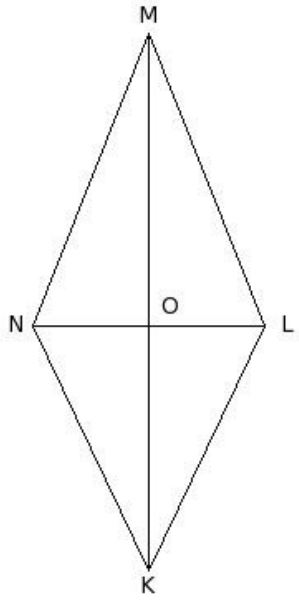
(i) SAS Congruency (ii) RHS Congruency (iii) not congruent (iv) ASA Congruency (v) SSS Congruency

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



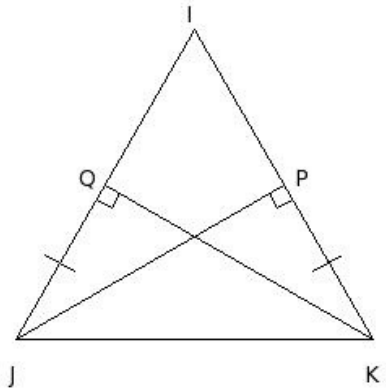
(i) SSS Congruency (ii) not congruent (iii) RHS Congruency (iv) ASA Congruency (v) SAS Congruency

3. In kite KLMN, $\overline{KM}$ and $\overline{LN}$ are diagonals. Then △OLK ≅



(i) △NLM (ii) △OMN (iii) △OML (iv) △ONK (v) △NLK

4. With the given data in the figure, △QJK ≅ △PKJ by which property?



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

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

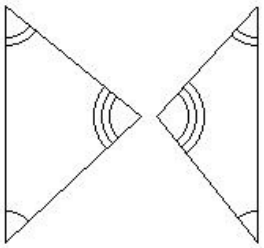


fig 3

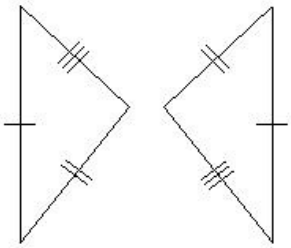


fig 4

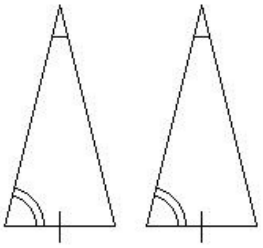


fig 1

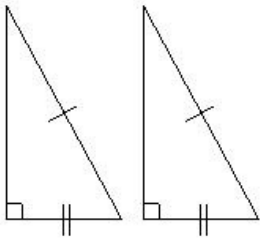


fig 2

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

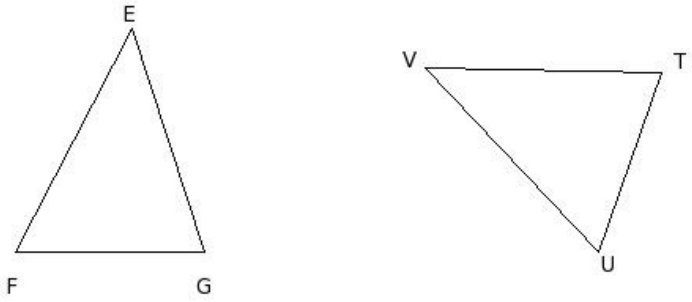
6. Which of the following are true?

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

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

7. In the given figure, △EFG ≅ △VUT. Which of the following are true?

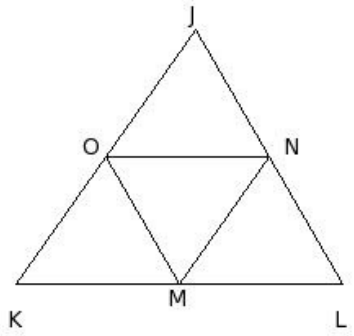
a) ∠G = ∠T
b) ∠E = ∠T
c) ∠F = ∠U
d) FG = VU
e) FG = UT



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

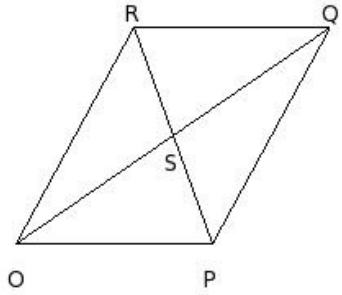
8. In the given figure, points M , N and O are the mid-points of sides KL, LJ and JK of △JKL. Which of the following are true?

a) △JON ≅ △NML
b) △JON ≅ △MNO
c) △OKM ≅ △JON
d) △JON ≅ △MON
e) △OKM ≅ △MNO



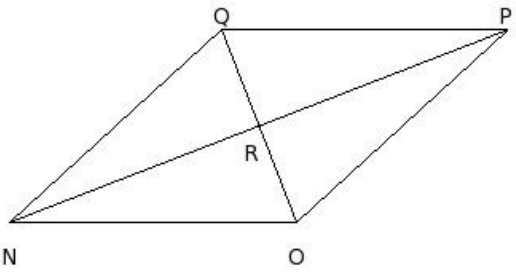
(i) {d,a} (ii) {a,b,c,e} (iii) {d,e,a} (iv) {d,b} (v) {d,c}

9. In parallelogram OPQR , diagonals $\overline{PR}$ and $\overline{OQ}$ intersect at S . Then △OPQ ≅



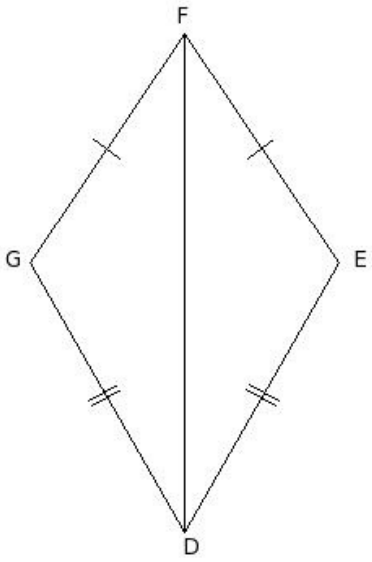
(i) △ROP (ii) △QRO (iii) △QRS (iv) △PQR (v) △OPS

10. In rhombus NOPQ, diagonals $\overline{NP}$ and $\overline{OQ}$ intersect at R. Then $\triangle PQN \cong$



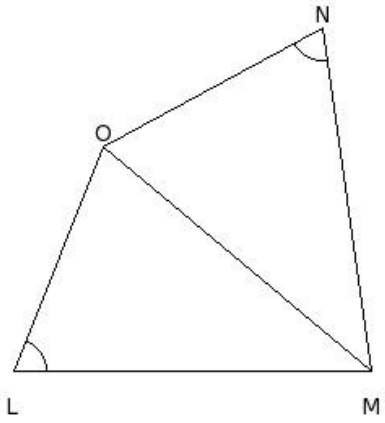
(i) $\triangle RNO$ (ii) $\triangle OPQ$ (iii) $\triangle NOP$ (iv) $\triangle QNO$

11. With the data in the given figure, $\triangle DGF \cong \triangle DEF$ by which property?



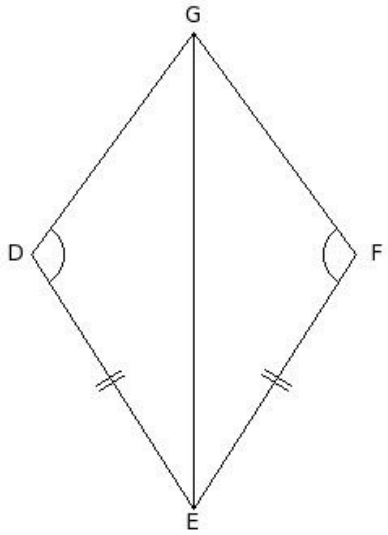
(i) SAS Congruency (ii) ASA Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

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



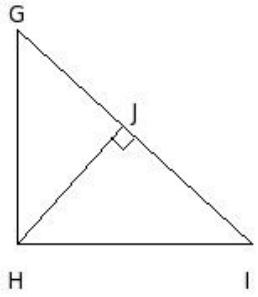
(i) not congruent (ii) SAS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) RHS Congruency

13. With the data in the figure, △DGE ≅ △FGE by which property?



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

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

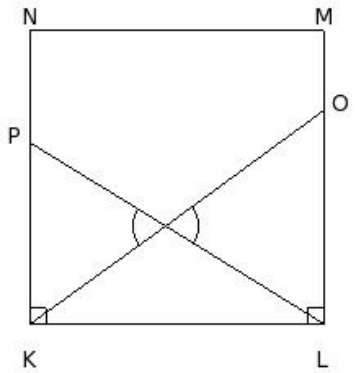


(i) ASA Congruency (ii) RHS Congruency (iii) not congruent (iv) SAS Congruency (v) SSS Congruency

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

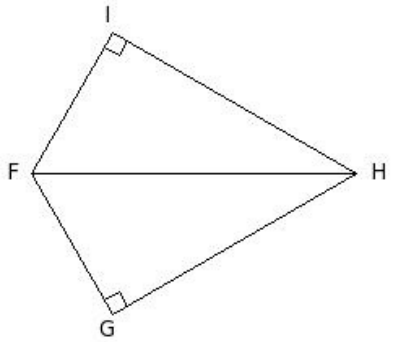
(i) △EFG ≅ △QRP (ii) △EFG ≅ △RPQ (iii) △EFG ≅ △PQR (iv) △EFG ≅ △RQP (v) △FGE ≅ △PQR

16. With the data in the figure, △KLO ≅ △LKP by which property?



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

17. With the data in the figure, △FHI ≅ △FHG by which property?



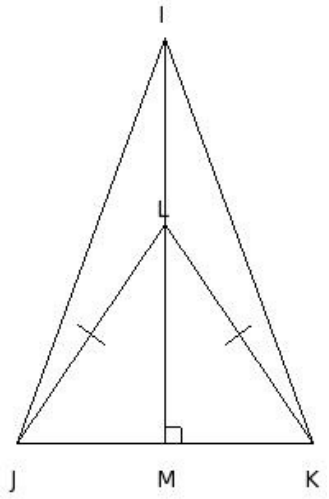
(i) SSS Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) ASA Congruency (v) not congruent

18. Which of the following are true?

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

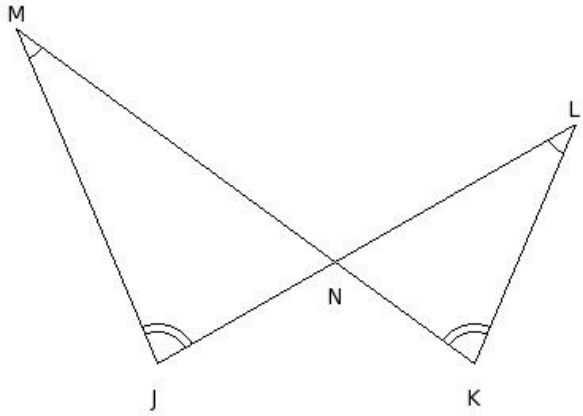
(i) {c,d} (ii) {b,a,d} (iii) {a,d,e} (iv) {b,c,e} (v) {b,a}

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



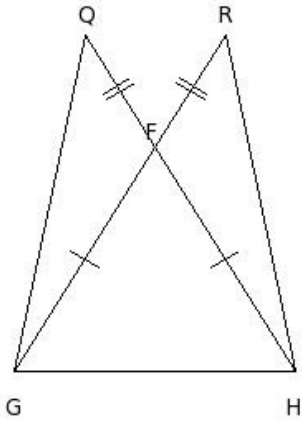
(i) ASA Congruency (ii) not congruent (iii) RHS Congruency (iv) SAS Congruency (v) SSS Congruency

20. With the data in the figure, △JNM ≅ △KNL by which property?



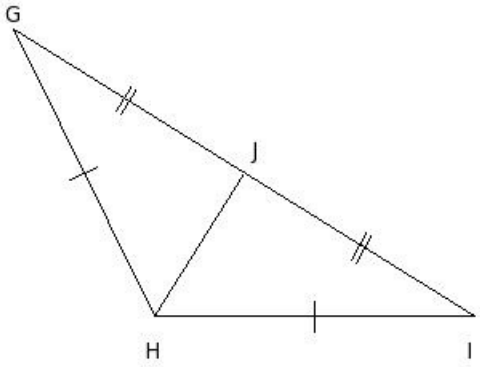
(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) SAS Congruency (v) ASA Congruency

21. With the data in the given figure, △QGH ≅ △RHG by which property?



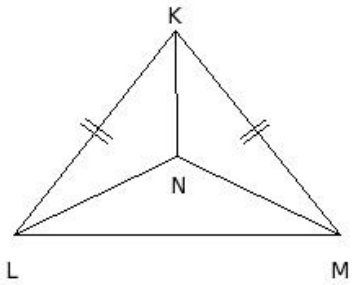
(i) RHS Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) not congruent (v) ASA Congruency

22. In the given figure, △GHI is an obtuse angled triangle. △GHJ ≅ △IHJ by which property?



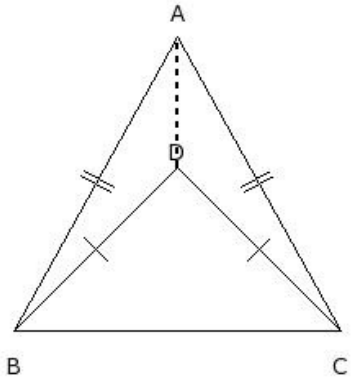
(i) SAS Congruency (ii) RHS Congruency (iii) not congruent (iv) ASA Congruency (v) SSS Congruency

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



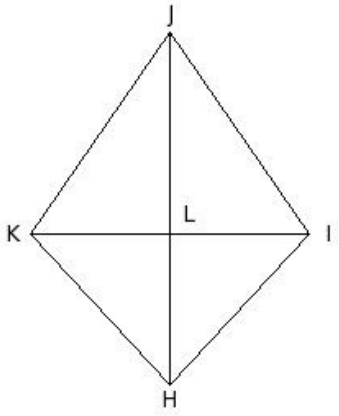
(i) ASA Congruency (ii) not congruent (iii) SSS Congruency (iv) SAS Congruency (v) RHS Congruency

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



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

25. In kite HIJK, $\overline{HJ}$ and $\overline{IK}$ are diagonals. Then $\triangle JKH \cong$



(i) $\triangle KIJ$ (ii) $\triangle LJI$ (iii) $\triangle LKH$ (iv) $\triangle KIH$ (v) $\triangle JIH$

Assignment Key

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