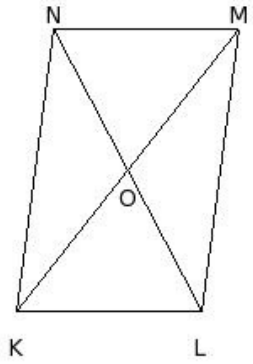
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Triangles

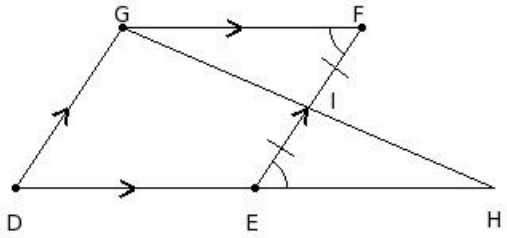
Grade : SSC Grade IX

1. In parallelogram KLMN, diagonals $\overline{LN}$ and $\overline{KM}$ intersect at O. Then $\triangle MNK \cong$



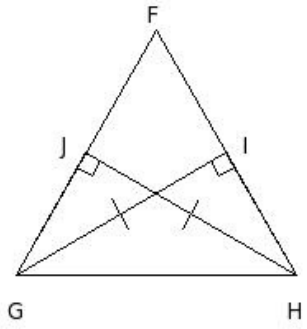
(i) $\triangle KLM$ (ii) $\triangle NKL$ (iii) $\triangle LMN$ (iv) $\triangle MNO$ (v) $\triangle KLO$

2. With the given data in the figure, $\triangle GFI \cong \triangle HEI$ by which property?



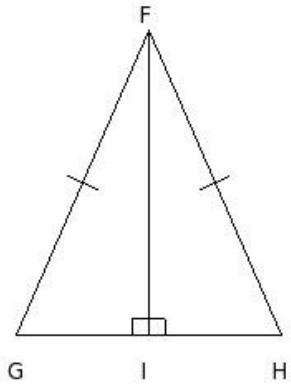
(i) ASA Congruency (ii) not congruent (iii) RHS Congruency (iv) SAS Congruency (v) SSS Congruency

3. With the data in the given figure, $\triangle GIH \cong \triangle HJG$ by which property?



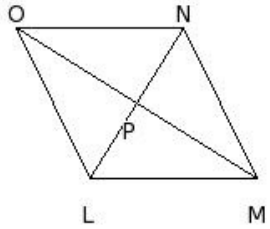
(i) ASA Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) not congruent (v) SAS Congruency

4. With the data in the given figure, $\triangle FGI \cong \triangle FHI$ by which property?



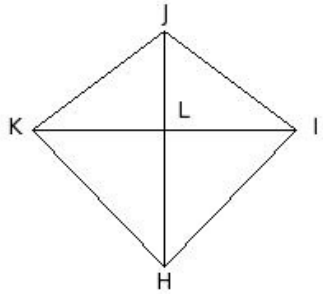
(i) ASA Congruency (ii) SAS Congruency (iii) RHS Congruency (iv) not congruent (v) SSS Congruency

5. In rhombus LMNO, diagonals $\overline{LN}$ and $\overline{MO}$ intersect at P. Then $\triangle MNO \cong$



(i) $\triangle LMN$ (ii) $\triangle NOL$ (iii) $\triangle OLM$ (iv) $\triangle PLM$

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

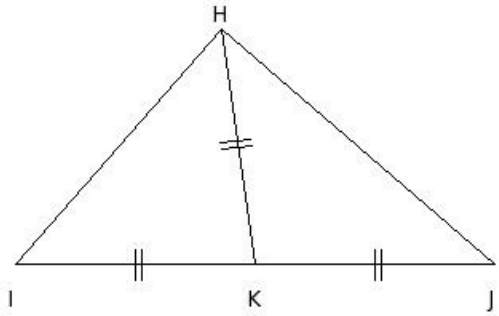


(i) $\triangle LIH$ (ii) $\triangle KIJ$ (iii) $\triangle KIH$ (iv) $\triangle LKH$ (v) $\triangle LJI$

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

(i) $\triangle CDB \cong \triangle RST$ (ii) $\triangle BCD \cong \triangle RST$ (iii) $\triangle BCD \cong \triangle STR$ (iv) $\triangle BCD \cong \triangle TRS$ (v) $\triangle BCD \cong \triangle TSR$

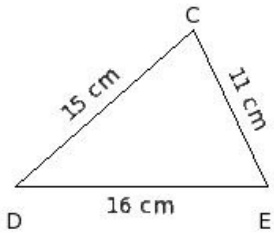
8. With the data in the figure, $\triangle HKI \cong \triangle HKJ$ by which property?

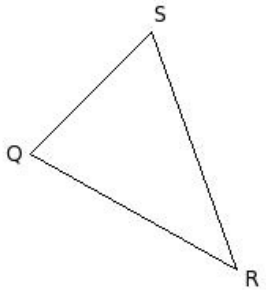


(i) not congruent (ii) SAS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) RHS Congruency

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

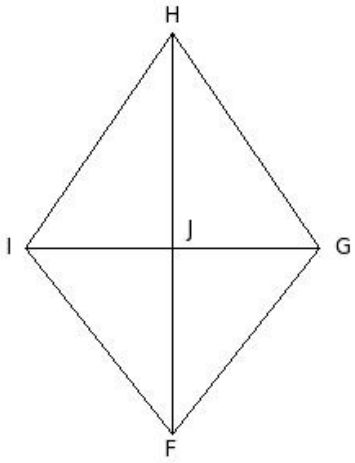
a) RS = 15 cm
b) RS = 16 cm
c) SQ = 15 cm
d) QR = 16 cm
e) SQ = 11 cm
f) QR = 15 cm





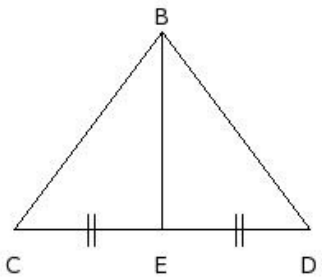
(i) {b,e,f} (ii) {c,b,e} (iii) {a,b} (iv) {c,e} (v) {d,a,f}

10. In kite FGHI, $\overline{FH}$ and $\overline{GI}$ are diagonals. Then △HGF ≅



(i) △JHG (ii) △JIF (iii) △HIF (iv) △IGH (v) △IGF

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



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

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

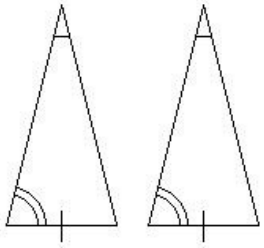


fig 3

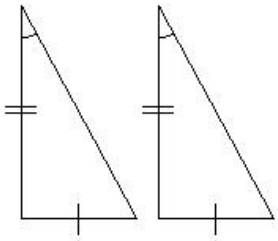


fig 4

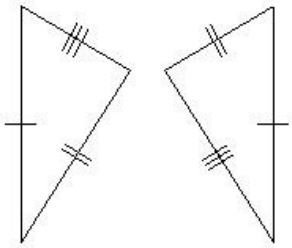


fig 1

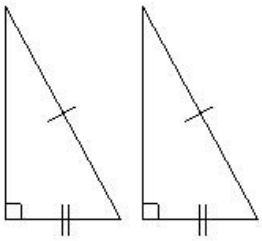


fig 2

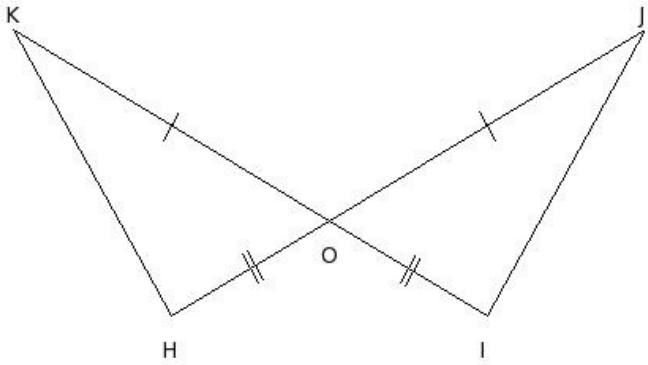
(i) fig 4 (ii) fig 2 (iii) fig 1 (iv) fig 3

13. Which of the following are true?

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

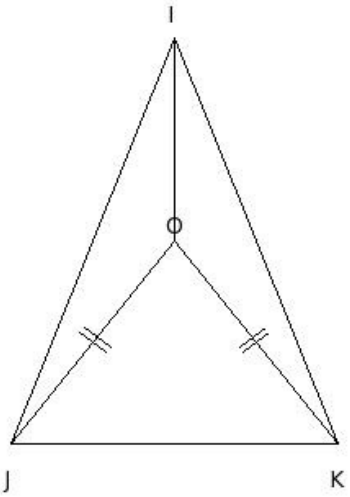
(i) {a,e,c} (ii) {c,e} (iii) {d,f,c} (iv) {a,c} (v) {b,e}

14. With the data in the given figure, △HKO ≅ △IJO by which property?



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

15. With the data in the given figure, $\triangle IOJ \cong \triangle IOK$ by which property?



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

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

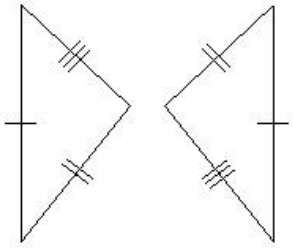


fig 3

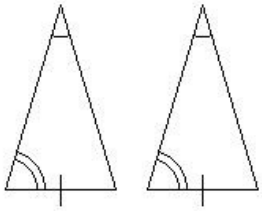


fig 4

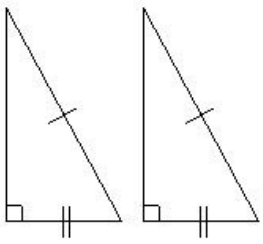


fig 1

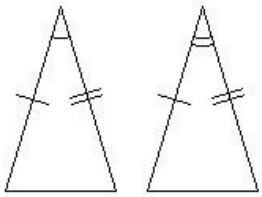
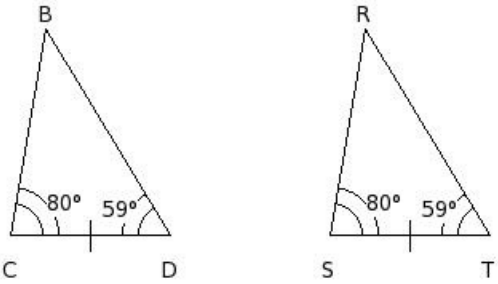


fig 2

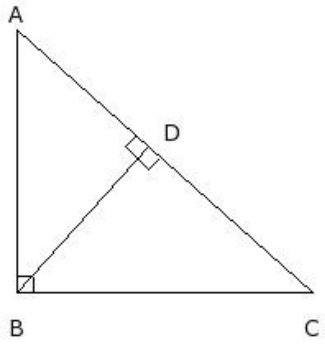
(i) fig 2 (ii) fig 4 (iii) fig 3 (iv) fig 1

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



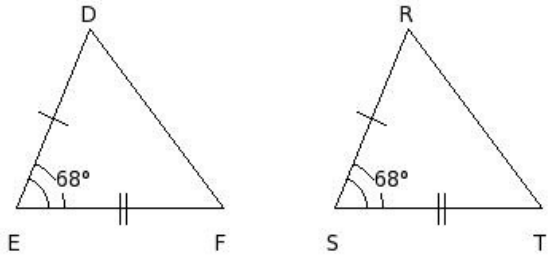
(i) RHS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) SAS Congruency

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



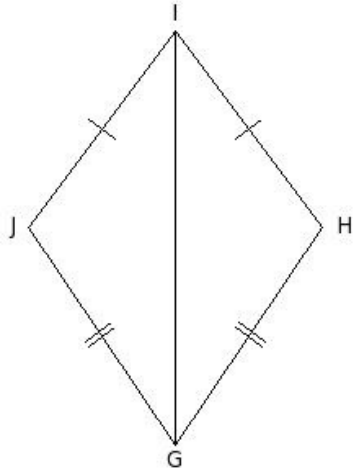
(i) SAS Congruency (ii) ASA Congruency (iii) RHS Congruency (iv) not congruent (v) SSS Congruency

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



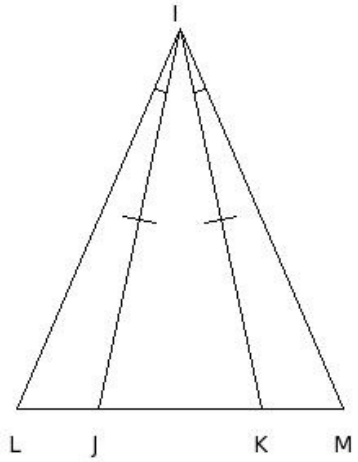
(i) RHS Congruency (ii) SSS Congruency (iii) SAS Congruency (iv) ASA Congruency

20. With the data in the given figure, △GJI ≅ △GHI by which property?



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

21. With the data in the given figure, △IJL ≅ △IKM by which property?



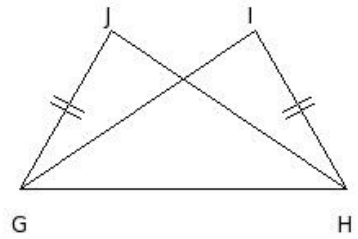
(i) RHS Congruency (ii) not congruent (iii) ASA Congruency (iv) SSS Congruency (v) SAS Congruency

22. Which of the following are true?

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

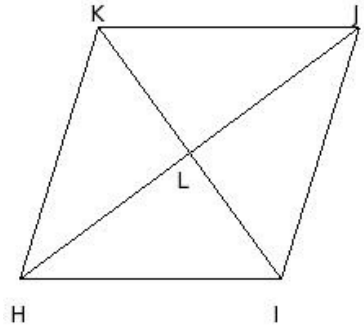
(i) {c,d,e} (ii) {b,d} (iii) {a,b,e} (iv) {a,c} (v) {a,c,d}

23. With the data in the figure, △GJH ≅ △HIG by which property?



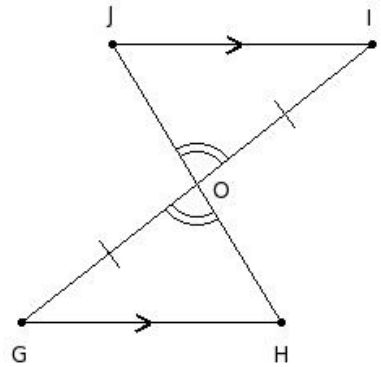
(i) SSS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) not congruent

24. In rhombus HIJK, diagonals $\overline{HJ}$ and $\overline{IK}$ intersect at L. Then △HIJ ≅



(i) △IJK (ii) △KHI (iii) △LHI (iv) △JKH

25. With the data in the given figure, △OJI ≅ △OHG by which property?



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

Assignment Key

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