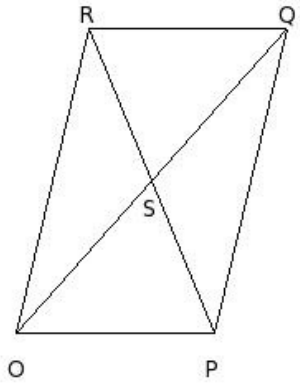
EduSahara™ Assignment

Name : Triangles Congruency Miscellaneous

Chapter : Triangles

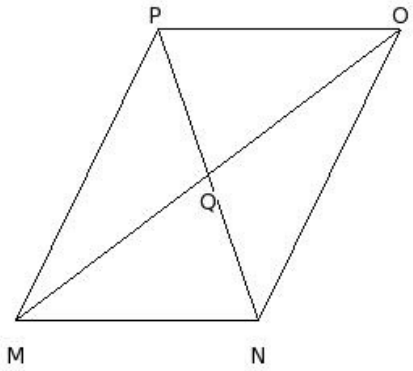
Grade : SSC Grade IX

1. In parallelogram OPQR, diagonals $\overline{PR}$ and $\overline{OQ}$ intersect at S. Then $\triangle ROP \cong$



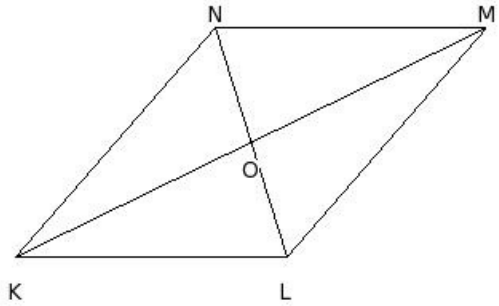
(i) $\triangle OPS$ (ii) $\triangle PQR$ (iii) $\triangle OPQ$ (iv) $\triangle QRS$ (v) $\triangle QRO$

2. In parallelogram MNOP, diagonals $\overline{NP}$ and $\overline{MO}$ intersect at Q. Then $\triangle NOP \cong$



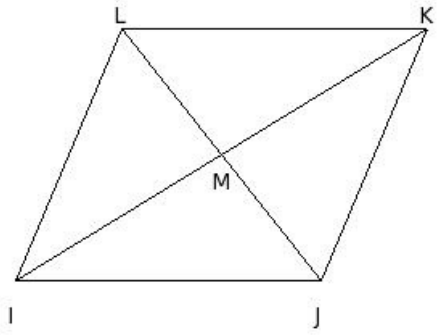
(i) $\triangle MNQ$ (ii) $\triangle PMN$ (iii) $\triangle OPM$ (iv) $\triangle MNO$ (v) $\triangle OPQ$

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



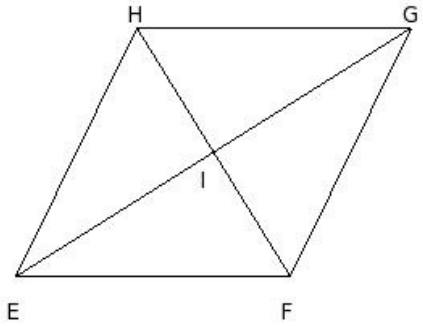
(i) $\triangle KLM$ (ii) $\triangle LMN$ (iii) $\triangle KLO$ (iv) $\triangle NKL$ (v) $\triangle MNO$

4. In parallelogram IJKL, diagonals $\overline{JL}$ and $\overline{IK}$ intersect at M. Then $\triangle IJK \cong$



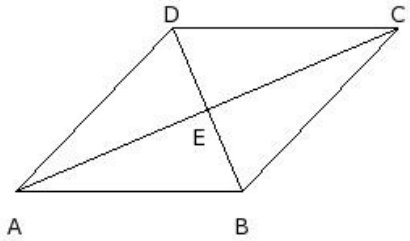
(i) $\triangle LIJ$ (ii) $\triangle KLM$ (iii) $\triangle JKL$ (iv) $\triangle KLI$ (v) $\triangle IJM$

5. In rhombus EFGH, diagonals $\overline{EG}$ and $\overline{FH}$ intersect at I. Then $\triangle HEF \cong$



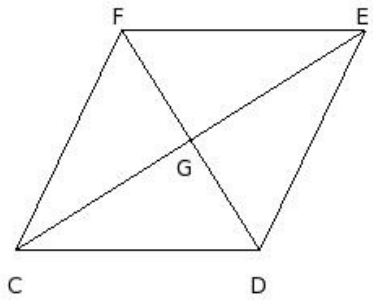
(i) $\triangle FGH$ (ii) $\triangle IEF$ (iii) $\triangle EFG$ (iv) $\triangle GHE$

6. In rhombus ABCD, diagonals $\overline{AC}$ and $\overline{BD}$ intersect at E. Then $\triangle BCD \cong$



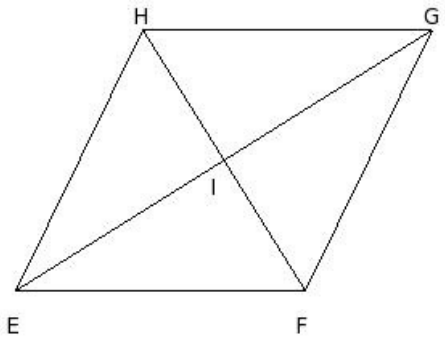
(i) $\triangle EAB$ (ii) $\triangle CDA$ (iii) $\triangle DAB$ (iv) $\triangle ABC$

7. In rhombus CDEF, diagonals $\overline{CE}$ and $\overline{DF}$ intersect at G. Then $\triangle EFC \cong$



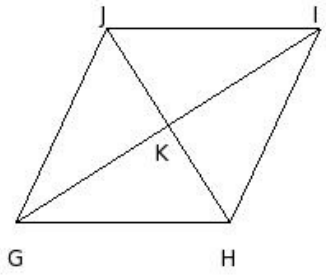
(i) $\triangle FCD$ (ii) $\triangle DEF$ (iii) $\triangle GCD$ (iv) $\triangle CDE$

8. In rhombus EFGH, diagonals $\overline{EG}$ and $\overline{FH}$ intersect at I. Then $\triangle EFG \cong$



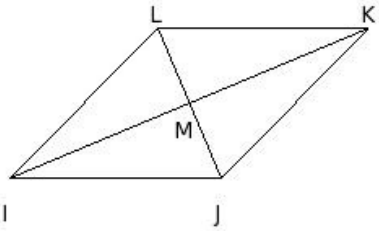
(i) $\triangle FGH$ (ii) $\triangle GHE$ (iii) $\triangle IEF$ (iv) $\triangle HEF$

9. In rhombus GHIJ, diagonals $\overline{GI}$ and $\overline{HJ}$ intersect at K. Then $\triangle KGH \ncong$



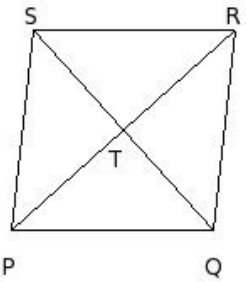
(i) $\triangle KGJ$ (ii) $\triangle JGH$ (iii) $\triangle KIJ$ (iv) $\triangle KIH$

10. In rhombus IJKL, diagonals $\overline{IK}$ and $\overline{JL}$ intersect at M. Then $\triangle MKJ \ncong$



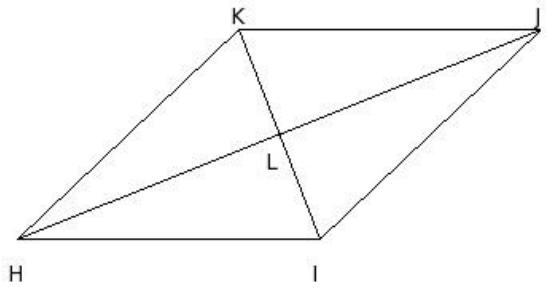
(i) $\triangle LIJ$ (ii) $\triangle MKL$ (iii) $\triangle MIJ$ (iv) $\triangle MIL$

11. In rhombus PQRS, diagonals $\overline{PR}$ and $\overline{QS}$ intersect at T. Then $\triangle TRS \ncong$



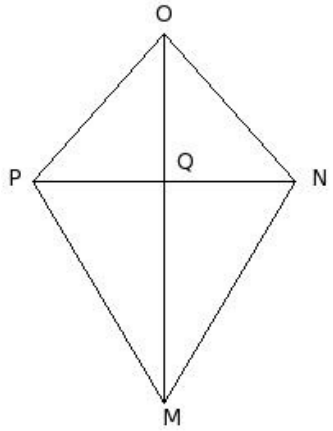
(i) $\triangle TPS$ (ii) $\triangle TPQ$ (iii) $\triangle SPQ$ (iv) $\triangle TRQ$

12. In rhombus HIJK, diagonals $\overline{HJ}$ and $\overline{IK}$ intersect at L. Then $\triangle LHK \ncong$



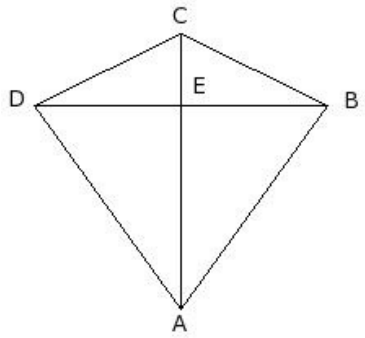
(i) $\triangle LHI$ (ii) $\triangle KHI$ (iii) $\triangle LJK$ (iv) $\triangle LJI$

13. In kite MNOP, $\overline{MO}$ and $\overline{NP}$ are diagonals. Then $\triangle OPM \cong$



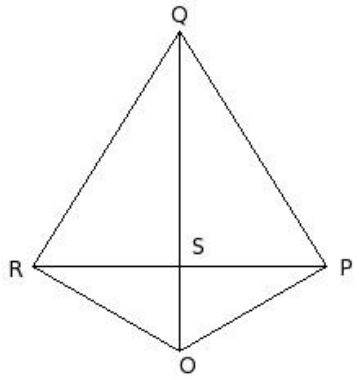
(i) $\triangle PNO$ (ii) $\triangle PNM$ (iii) $\triangle QON$ (iv) $\triangle ONM$ (v) $\triangle QPM$

14. In kite ABCD, $\overline{AC}$ and $\overline{BD}$ are diagonals. Then $\triangle CBA \cong$



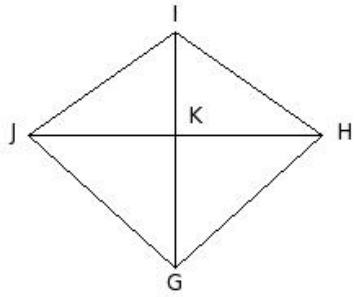
(i) $\triangle EDA$ (ii) $\triangle DBA$ (iii) $\triangle DBC$ (iv) $\triangle ECB$ (v) $\triangle CDA$

15. In kite OPQR, $\overline{OQ}$ and $\overline{PR}$ are diagonals. Then $\triangle SRO \cong$



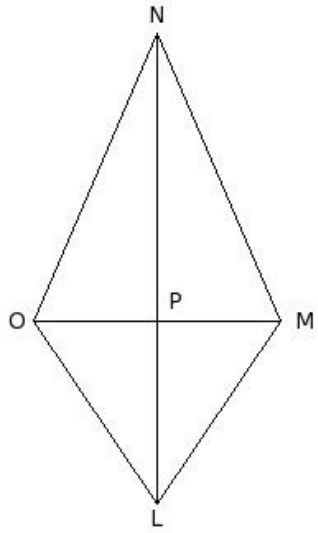
(i) $\triangle RPO$ (ii) $\triangle RPQ$ (iii) $\triangle SPO$ (iv) $\triangle SQR$ (v) $\triangle SQP$

16. In kite GHIJ, $\overline{GI}$ and $\overline{HJ}$ are diagonals. Then $\triangle KHG \cong$



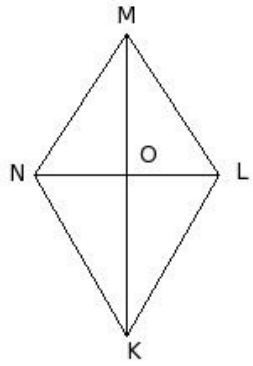
(i) $\triangle KJG$ (ii) $\triangle KIH$ (iii) $\triangle JHG$ (iv) $\triangle KIJ$ (v) $\triangle JHI$

17. In kite LMNO, $\overline{LN}$ and $\overline{MO}$ are diagonals. Then $\triangle PNO \cong$



(i) $\triangle OML$ (ii) $\triangle POL$ (iii) $\triangle PML$ (iv) $\triangle PNM$ (v) $\triangle OMN$

18. In kite KLMN, $\overline{KM}$ and $\overline{LN}$ are diagonals. Then $\triangle OML \cong$



(i) $\triangle NLK$ (ii) $\triangle ONK$ (iii) $\triangle OLK$ (iv) $\triangle OMN$ (v) $\triangle NLM$

19. Which of the following are true?

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

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

20. Which of the following are true?

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

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

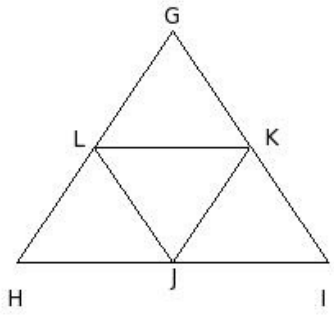
21. Which of the following are true?

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

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

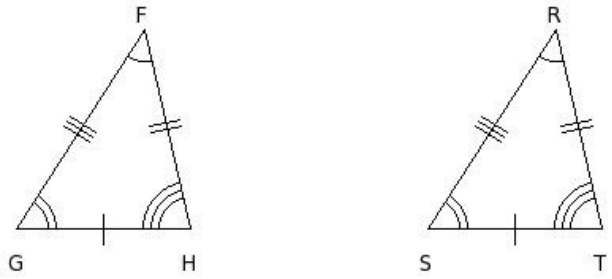
22. In the given figure, points J , K and L are the mid-points of sides HI, IG and GH of △GHI. Which of the following are true?

a) △LHJ ≅ △JKL
b) △LHJ ≅ △GLK
c) △GLK ≅ △JLK
d) △GLK ≅ △JKL
e) △GLK ≅ △KJI



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

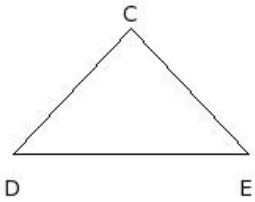
23. In the given figure, which of the following is true?

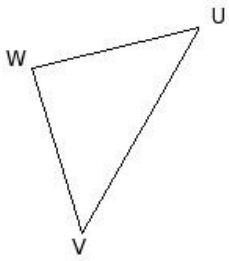


(i) △FGH ≅ △TRS (ii) △FGH ≅ △STR (iii) △FGH ≅ △RST (iv) △FGH ≅ △TSR (v) △GHF ≅ △RST

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

a) ∠E = ∠U
b) DE = WV
c) DE = VU
d) ∠D = ∠V
e) ∠C = ∠U

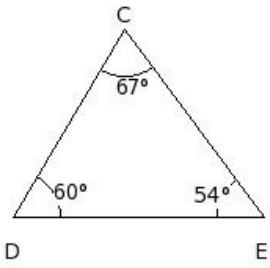


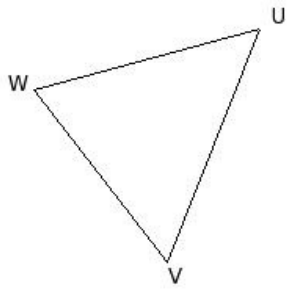


(i) {b,e,d} (ii) {b,a,c} (iii) {b,a} (iv) {e,c} (v) {a,c,d}

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

a) ∠U = 54°
b) ∠U = 67°
c) ∠V = 60°
d) ∠W = 67°
e) ∠V = 54°
f) ∠W = 60°

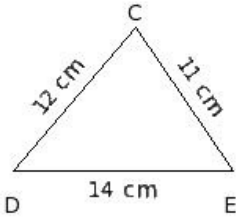


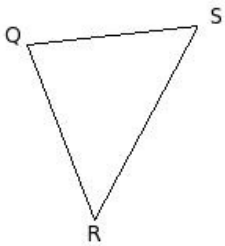


(i) {a,c,d} (ii) {e,a,c} (iii) {e,c} (iv) {f,b,d} (v) {b,a}

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

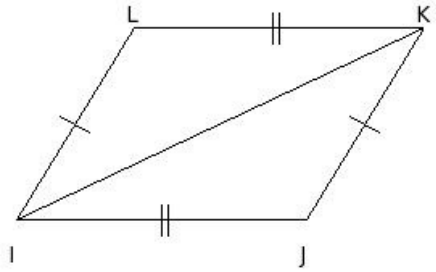
a) QR = 12 cm
b) SQ = 11 cm
c) SQ = 12 cm
d) QR = 14 cm
e) RS = 14 cm
f) RS = 12 cm





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

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



(i) △IKL ≅ △IJK (ii) △IKL ≅ △KIJ (iii) △IKL ≅ △IKJ (iv) △ILK ≅ △JKI (v) △ILK ≅ △IJK

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

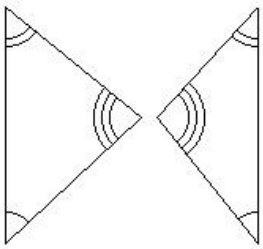


fig 3

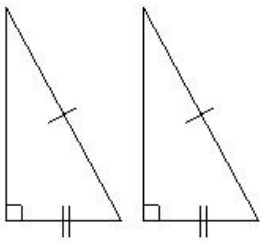


fig 4

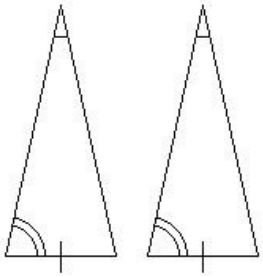


fig 1

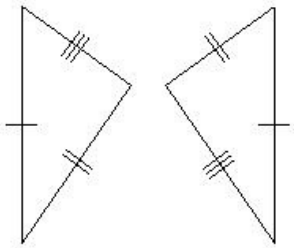


fig 2

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

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

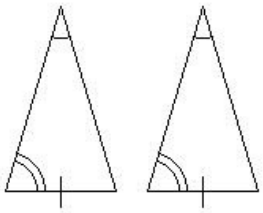


fig 3

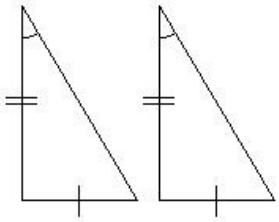


fig 4

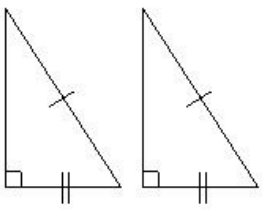


fig 1

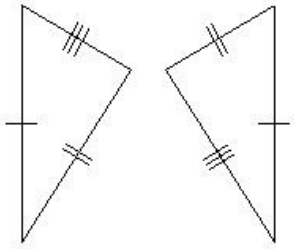


fig 2

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

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

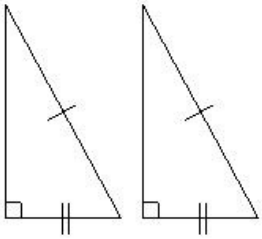


fig 3

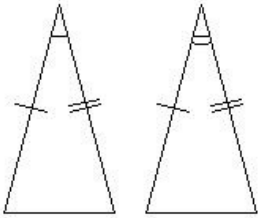


fig 4

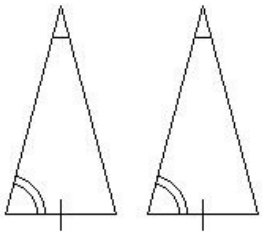


fig 1

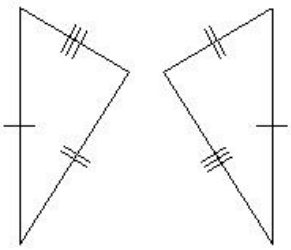


fig 2

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

Assignment Key

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