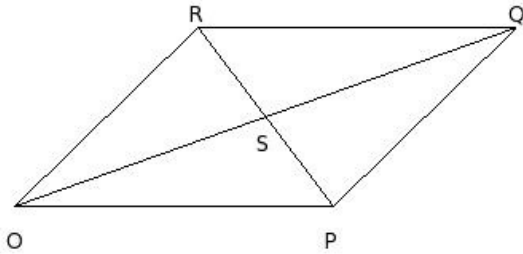


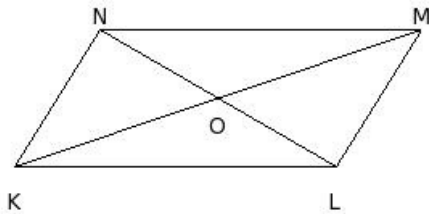


1. In parallelogram OPQR, diagonals \overline{PR} and \overline{OQ} intersect at S. Then $\triangle ROP \cong$



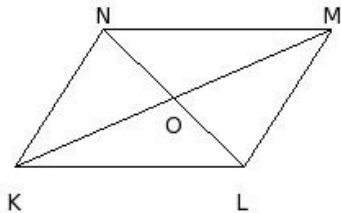
- (i) $\triangle PQR$ (ii) $\triangle QRS$ (iii) $\triangle QRO$ (iv) $\triangle OPQ$ (v) $\triangle OPS$

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



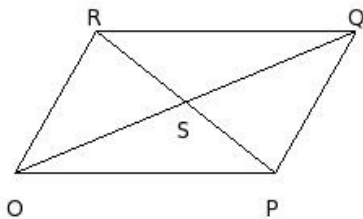
- (i) $\triangle MNK$ (ii) $\triangle NKL$ (iii) $\triangle MNO$ (iv) $\triangle KLM$ (v) $\triangle KLO$

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



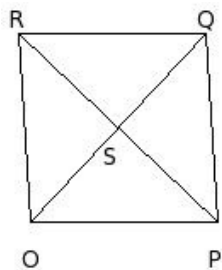
- (i) $\triangle NKL$ (ii) $\triangle KLM$ (iii) $\triangle LMN$ (iv) $\triangle MNO$ (v) $\triangle KLO$

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



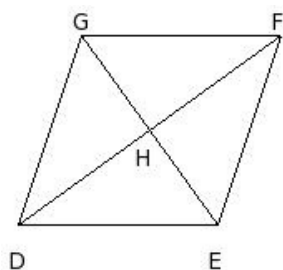
- (i) $\triangle QRS$ (ii) $\triangle ROP$ (iii) $\triangle QRO$ (iv) $\triangle OPS$ (v) $\triangle PQR$

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



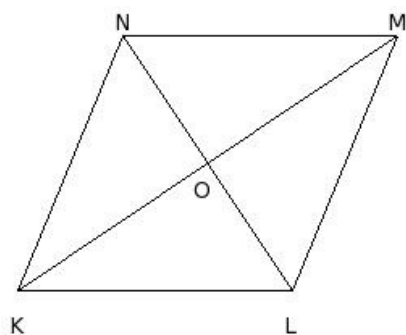
- (i) $\triangle QRO$ (ii) $\triangle SOP$ (iii) $\triangle PQR$ (iv) $\triangle OPQ$

6. In rhombus $DEFG$, diagonals \overline{DF} and \overline{EG} intersect at H . Then $\triangle EFG \cong$



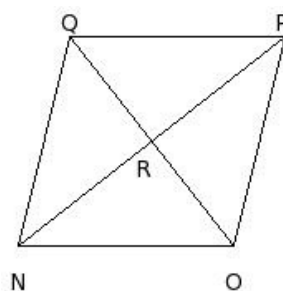
- (i) $\triangle GDE$ (ii) $\triangle HDE$ (iii) $\triangle DEF$ (iv) $\triangle FGD$

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



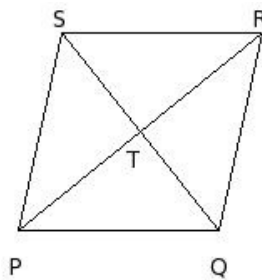
- (i) $\triangle LMN$ (ii) $\triangle KLM$ (iii) $\triangle NKL$ (iv) $\triangle OKL$

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



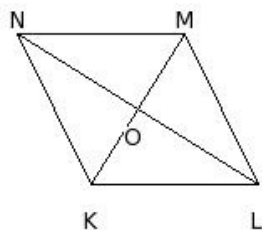
- (i) $\triangle QNO$ (ii) $\triangle OPQ$ (iii) $\triangle RNO$ (iv) $\triangle PQN$

9. In rhombus PQRS, diagonals \overline{PR} and \overline{QS} intersect at T. Then $\triangle TPQ \cong$



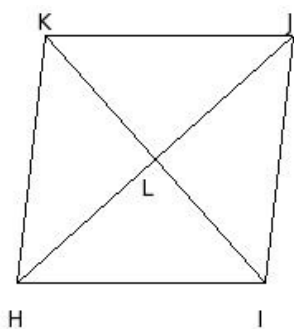
- (i) $\triangle SPQ$ (ii) $\triangle TPS$ (iii) $\triangle TRQ$ (iv) $\triangle TRS$

10. In rhombus KLMN, diagonals \overline{KM} and \overline{LN} intersect at O. Then $\triangle OML \cong$



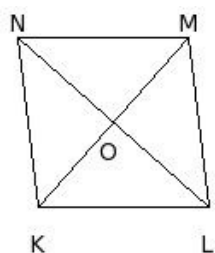
- (i) $\triangle NKL$ (ii) $\triangle OMN$ (iii) $\triangle OKL$ (iv) $\triangle OKN$

11. In rhombus HIJK, diagonals \overline{HJ} and \overline{IK} intersect at L. Then $\triangle LJK \cong$



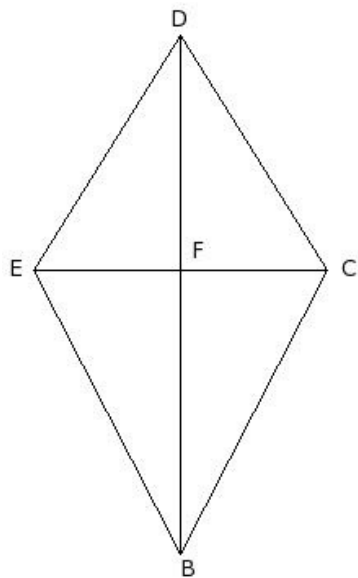
- (i) $\triangle LHK$ (ii) $\triangle KHI$ (iii) $\triangle LJI$ (iv) $\triangle LHI$

12. In rhombus KLMN, diagonals \overline{KM} and \overline{LN} intersect at O. Then $\triangle OKN \cong$



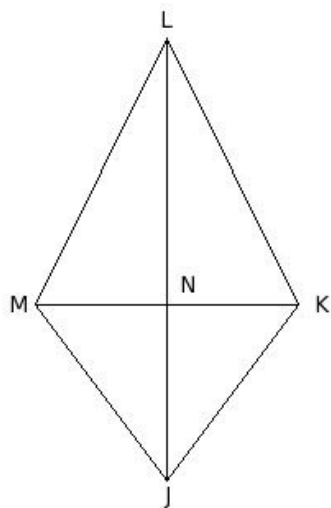
- (i) $\triangle OMN$ (ii) $\triangle OKL$ (iii) $\triangle OML$ (iv) $\triangle NKL$

13. In kite $BCDE$, \overline{BD} and \overline{CE} are diagonals. Then $\triangle DEB \cong$



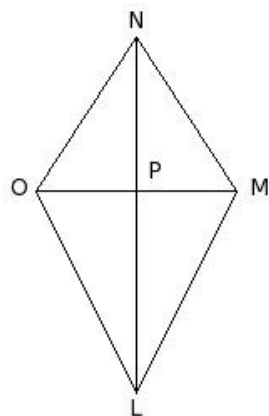
- (i) $\triangle ECB$ (ii) $\triangle FDC$ (iii) $\triangle ECD$ (iv) $\triangle FEB$ (v) $\triangle DCB$

14. In kite $JKLM$, \overline{JL} and \overline{KM} are diagonals. Then $\triangle LKJ \cong$



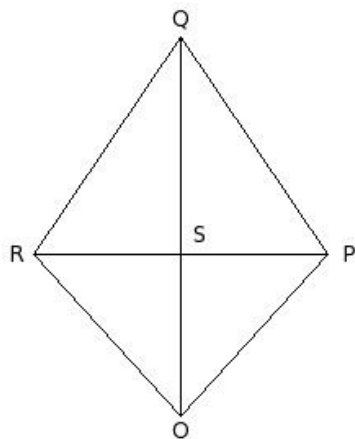
- (i) $\triangle NLK$ (ii) $\triangle LMJ$ (iii) $\triangle NMJ$ (iv) $\triangle MKJ$ (v) $\triangle MKL$

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



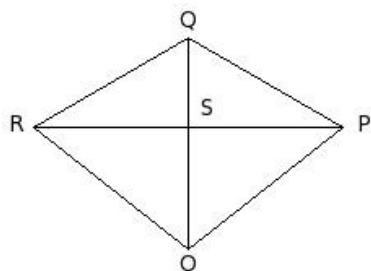
- (i) $\triangle PNO$ (ii) $\triangle OMN$ (iii) $\triangle PML$ (iv) $\triangle OML$ (v) $\triangle PNM$

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



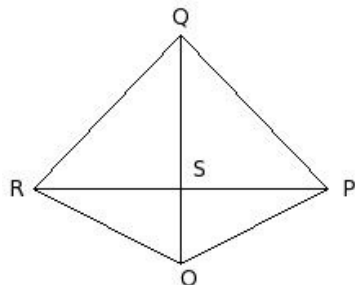
- (i) $\triangle RPO$ (ii) $\triangle SQP$ (iii) $\triangle SRO$ (iv) $\triangle RPQ$ (v) $\triangle SQR$

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



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

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



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

19. Which of the following are true?

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

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

20. Which of the following are true?

- a) A sector 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 square is a polygonal region.

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

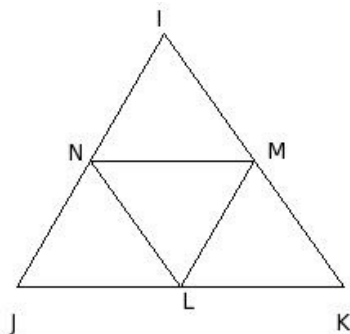
21. Which of the following are true?

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

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

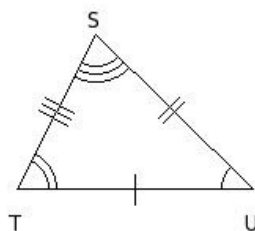
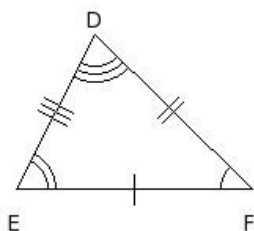
22. In the given figure, points L, M and N are the mid-points of sides JK, KI and IJ of $\triangle IJK$. Which of the following are true?

- a) $\triangle NJL \cong \triangle LMN$
- b) $\triangle INM \cong \triangle LNM$
- c) $\triangle NJL \cong \triangle INM$
- d) $\triangle INM \cong \triangle MLK$
- e) $\triangle INM \cong \triangle LMN$



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

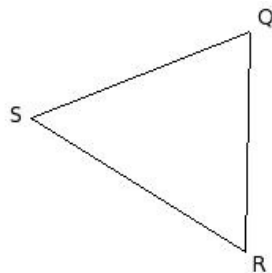
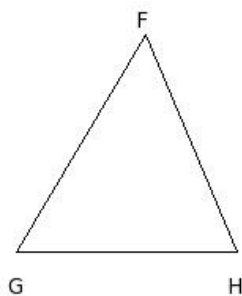
23. In the given figure, which of the following is true?



(i) $\triangle DEF \cong \triangle TUS$ (ii) $\triangle DEF \cong \triangle UTS$ (iii) $\triangle DEF \cong \triangle STU$ (iv) $\triangle EFD \cong \triangle STU$ (v) $\triangle DEF \cong \triangle UST$

24. In the given figure, $\triangle FGH \cong \triangle SRQ$. Which of the following are true?

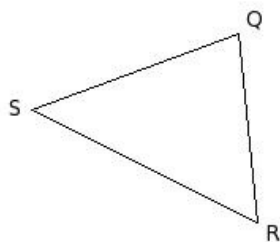
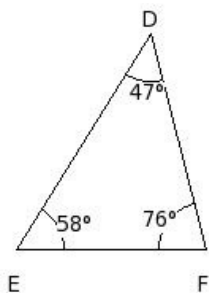
- a) $GH = SR$
- b) $\angle F = \angle Q$
- c) $GH = RQ$
- d) $\angle H = \angle Q$
- e) $\angle G = \angle R$



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

25. In the given figure, $\triangle DEF \cong \triangle SRQ$. Which of the following are true?

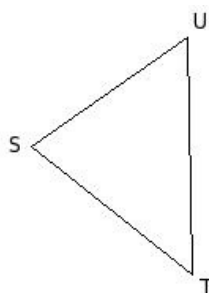
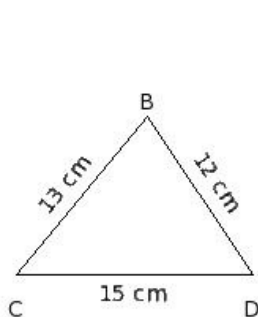
- a) $\angle S = 58^\circ$
- b) $\angle R = 58^\circ$
- c) $\angle Q = 47^\circ$
- d) $\angle Q = 76^\circ$
- e) $\angle S = 47^\circ$
- f) $\angle R = 76^\circ$



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

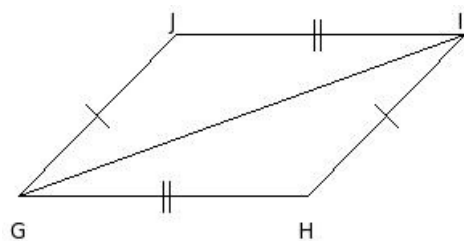
26. In the given figure, $\triangle BCD \cong \triangle STU$. Which of the following are true?

- a) $US = 13 \text{ cm}$
- b) $TU = 13 \text{ cm}$
- c) $US = 12 \text{ cm}$
- d) $ST = 13 \text{ cm}$
- e) $TU = 15 \text{ cm}$
- f) $ST = 15 \text{ cm}$



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

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



- (i) $\triangle GJI \cong \triangle GHI$ (ii) $\triangle GIJ \cong \triangle IGH$ (iii) $\triangle GJI \cong \triangle HIG$ (iv) $\triangle GIJ \cong \triangle GHI$ (v) $\triangle GIJ \cong \triangle GIH$

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

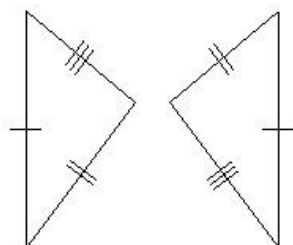


fig 3

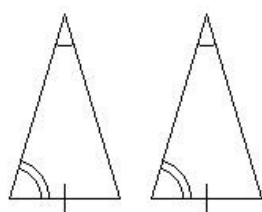


fig 4

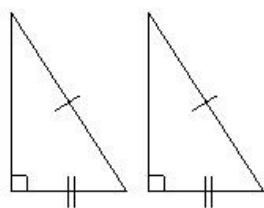


fig 1

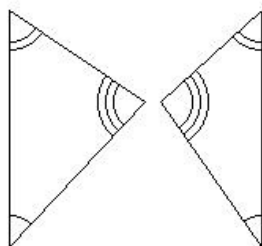


fig 2

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

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

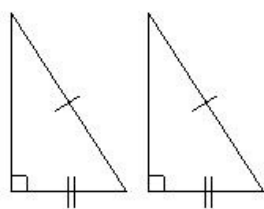


fig 3

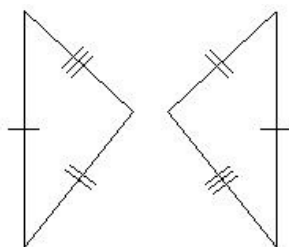


fig 4

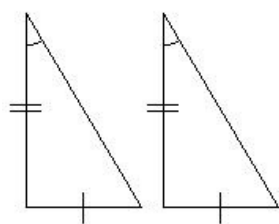


fig 1

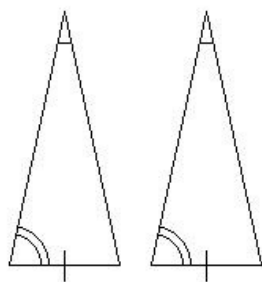


fig 2

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

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

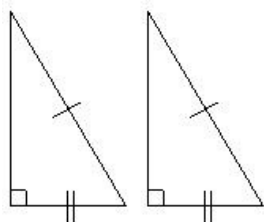


fig 3

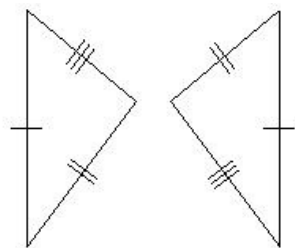


fig 4

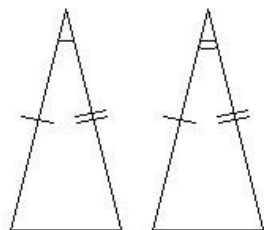


fig 1

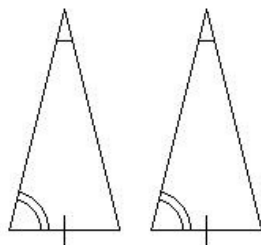


fig 2

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

Assignment Key

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