EduSahara™ Assignment

Name : Paralellogram Properties Using Diagrams

Chapter : Quadrilaterals

Grade : ICSE Grade VII

1. In the given parallelogram, which of the following statements are true?

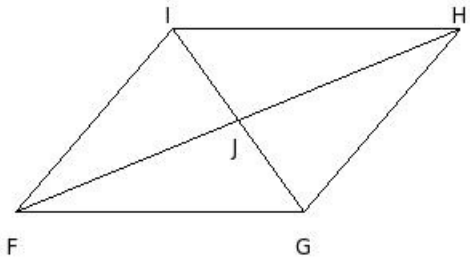
   a) $\triangle GIF \cong \triangle HIF$

   b) $GJ = IJ$

   c) $GJ = JF$

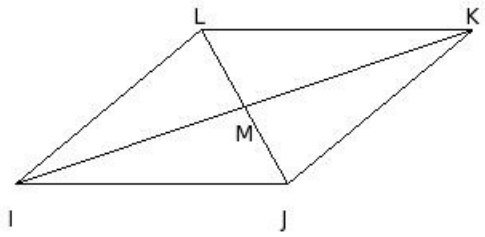
   d) J is the mid point of $\overline{GI}$

   e) $\triangle JIF \cong \triangle JGH$



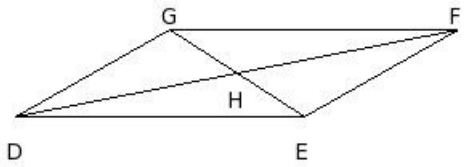
   (i) {c,d} (ii) {a,c,e} (iii) {b,d,e} (iv) {a,b,d} (v) {a,b}

2. In parallelogram IJKL, diagonals $\overline{JL}$ and $\overline{IK}$ intersect at M. Then $\overline{IJ} \parallel$



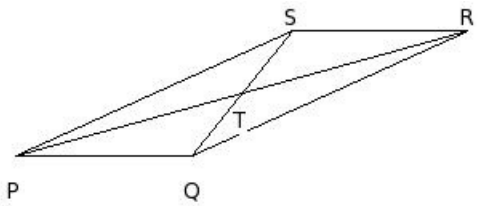
   (i) $\overline{JK}$ (ii) $\overline{JL}$ (iii) $\overline{LI}$ (iv) $\overline{IK}$ (v) $\overline{KL}$

3. In parallelogram DEFG, diagonals $\overline{EG}$ and $\overline{DF}$ intersect at H. Then $\overline{FG} \parallel$



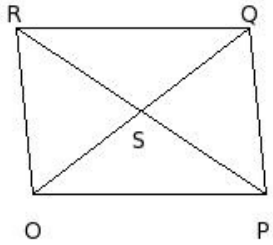
   (i) $\overline{GD}$ (ii) $\overline{DE}$ (iii) $\overline{EG}$ (iv) $\overline{EF}$ (v) $\overline{DF}$

4. In parallelogram PQRS, diagonals $\overline{QS}$ and $\overline{PR}$ intersect at T. Then $\overline{SP} \parallel$



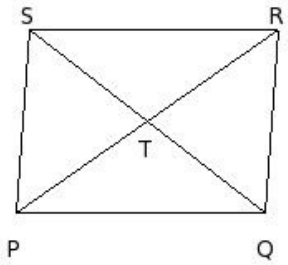
   (i) $\overline{QS}$ (ii) $\overline{PR}$ (iii) $\overline{PQ}$ (iv) $\overline{QR}$ (v) $\overline{RS}$

5. In parallelogram OPQR, diagonals $\overline{PR}$ and $\overline{OQ}$ intersect at S. Then $\overline{PQ}$ ∥



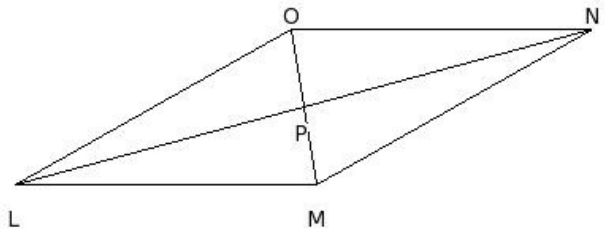
(i) $\overline{PR}$ (ii) $\overline{RO}$ (iii) $\overline{QR}$ (iv) $\overline{OP}$ (v) $\overline{OQ}$

6. In parallelogram PQRS, diagonals $\overline{QS}$ and $\overline{PR}$ intersect at T. Then PQ =



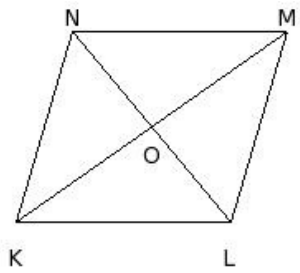
(i) PR (ii) QS (iii) RS (iv) QR (v) SP

7. In parallelogram LMNO, diagonals $\overline{MO}$ and $\overline{LN}$ intersect at P. Then NO =



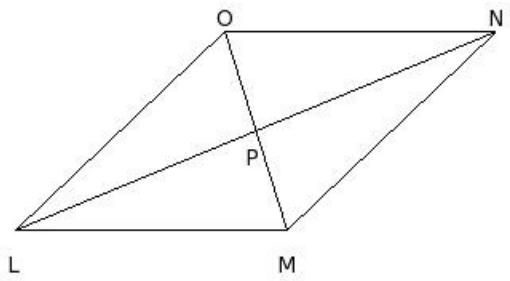
(i) MN (ii) LN (iii) LM (iv) OL (v) MO

8. In parallelogram KLMN, diagonals $\overline{LN}$ and $\overline{KM}$ intersect at O. Then NK =



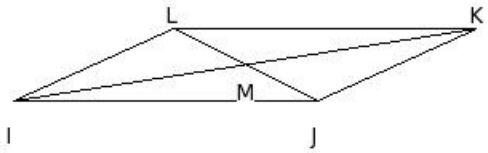
(i) KM (ii) LM (iii) MN (iv) LN (v) KL

9. In parallelogram LMNO, diagonals $\overline{MO}$ and $\overline{LN}$ intersect at P. Then MN =



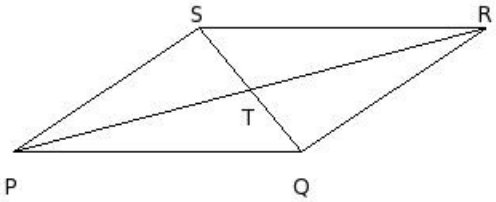
(i) OL (ii) NO (iii) LM (iv) MO (v) LN

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



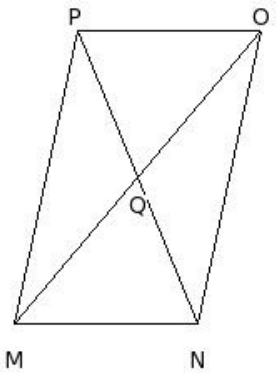
(i) $\triangle KLM$ (ii) $\triangle IJM$ (iii) $\triangle KLI$ (iv) $\triangle IJK$ (v) $\triangle JKL$

11. In parallelogram PQRS, diagonals $\overline{QS}$ and $\overline{PR}$ intersect at T. Then $\triangle QRS \cong$



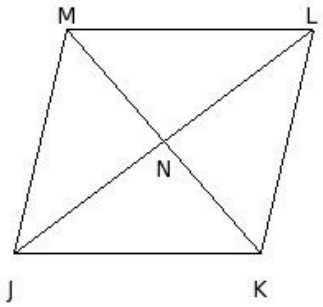
(i) $\triangle SPQ$ (ii) $\triangle PQT$ (iii) $\triangle RSP$ (iv) $\triangle RST$ (v) $\triangle PQR$

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



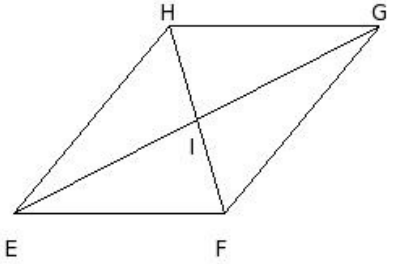
(i) $\triangle OPQ$ (ii) $\triangle MNQ$ (iii) $\triangle NOP$ (iv) $\triangle PMN$ (v) $\triangle MNO$

13. In parallelogram JKLM, diagonals $\overline{KM}$ and $\overline{JL}$ intersect at N. Then $\triangle JKL \cong$



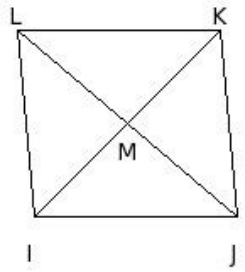
(i) $\triangle JKN$ (ii) $\triangle KLM$ (iii) $\triangle LMN$ (iv) $\triangle MJK$ (v) $\triangle LMJ$

14. In parallelogram EFGH, diagonals $\overline{FH}$ and $\overline{EG}$ intersect at I. Then $\angle HEF =$



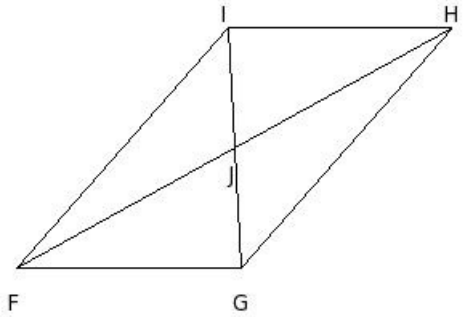
(i) $\angle EFI$ (ii) $\angle FGH$ (iii) $\angle EFG$ (iv) $\angle GHE$ (v) $\angle GHI$

15. In parallelogram IJKL, diagonals $\overline{JL}$ and $\overline{IK}$ intersect at M. Then ∠JKL =



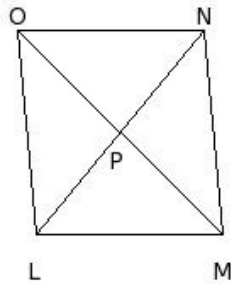
(i) ∠LIJ (ii) ∠KLI (iii) ∠IJM (iv) ∠KLM (v) ∠IJK

16. In parallelogram FGHI, diagonals $\overline{GI}$ and $\overline{FH}$ intersect at J. Then ∠FGH =



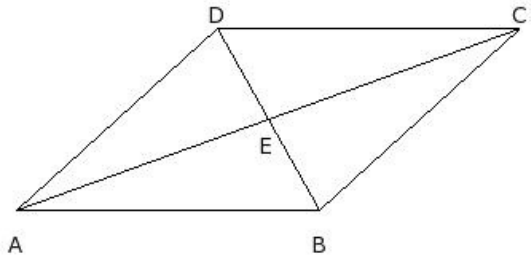
(i) ∠GHI (ii) ∠FGJ (iii) ∠IFG (iv) ∠HIF (v) ∠HIJ

17. In parallelogram LMNO, diagonals $\overline{MO}$ and $\overline{LN}$ intersect at P. Then ∠NOL =



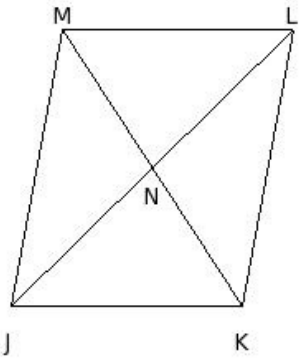
(i) ∠LMN (ii) ∠MNO (iii) ∠OLM (iv) ∠LMP (v) ∠NOP

18. In parallelogram ABCD, diagonals $\overline{BD}$ and $\overline{AC}$ intersect at E. Then CE =



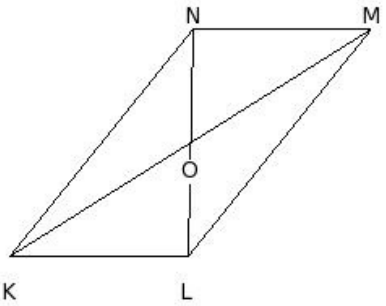
(i) DE (ii) BE (iii) DA (iv) AE (v) BC

19. In parallelogram JKLM, diagonals $\overline{KM}$ and $\overline{JL}$ intersect at N. Then JN =



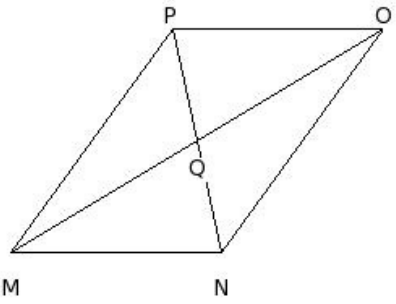
(i) LN (ii) KL (iii) MN (iv) KN (v) MJ

20. In parallelogram KLMN, diagonals $\overline{LN}$ and $\overline{KM}$ intersect at O. Then NO =



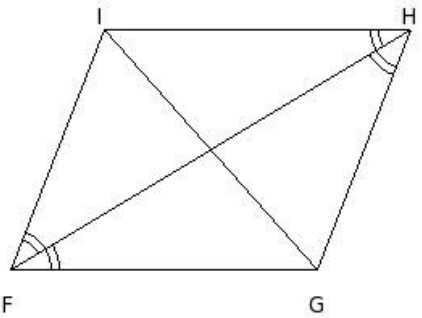
(i) KO (ii) LM (iii) NK (iv) LO (v) MO

21. In parallelogram MNOP, diagonals $\overline{NP}$ and $\overline{MO}$ intersect at Q. Then NQ =



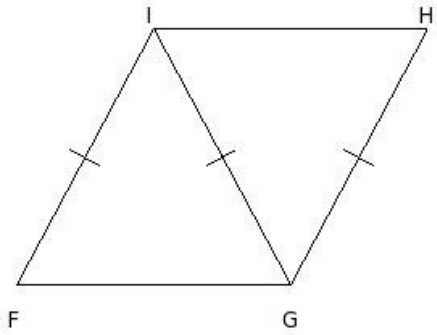
(i) NO (ii) OQ (iii) MQ (iv) PM (v) PQ

22. In the given figure, FGHI is a parallelogram. FH bisects ∠F & ∠H.
Given FH = 15 cm and GI = 10 cm, find FG



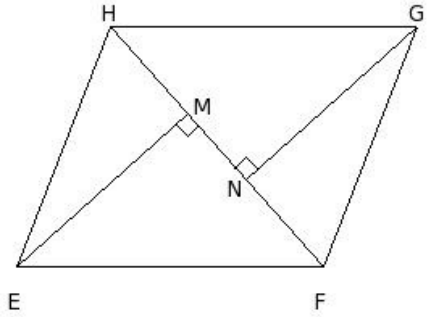
(i) 8.01 cm (ii) 11.01 cm (iii) 9.01 cm (iv) 10.01 cm (v) 7.01 cm

23. In the given figure, FGHI is a parallelogram. GI is the diagonal such that FI = GI = GH. Given ∠F = 62°, find ∠IGH



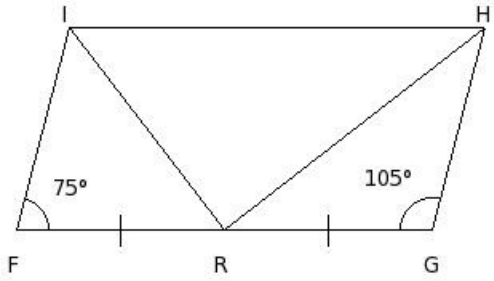
(i) 55° (ii) 58° (iii) 54° (iv) 57° (v) 56°

24. In the given figure, EFGH is a parallelogram. EM and GN are perpendicular to the diagonal FH. Given ∠MEF = 42°, find ∠GHF



(i) 46° (ii) 47° (iii) 50° (iv) 49° (v) 48°

25. In the given figure, FGHI is a parallelogram such that R is the mid-point of FG and FG = 2IF. Find ∠IRH



(i) 91° (ii) 89° (iii) 92° (iv) 88° (v) 90°

Assignment Key

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