EduSahara™ Assignment

Name : Quadrilateral Properties Using Diagrams

Chapter : Quadrilaterals

Grade : ICSE Grade VIII

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

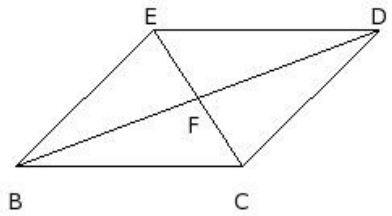
   a) F is the mid point of $\overline{BD}$

   b) CF = FD

   c) $\triangle FEB \cong \triangle FCD$

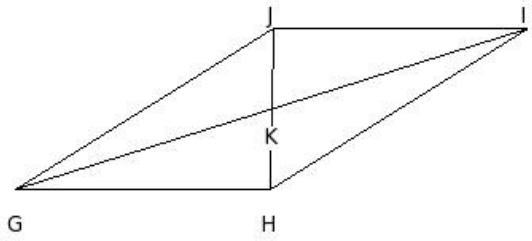
   d) $\overline{EB} \parallel \overline{CD}$

   e) CF = FB



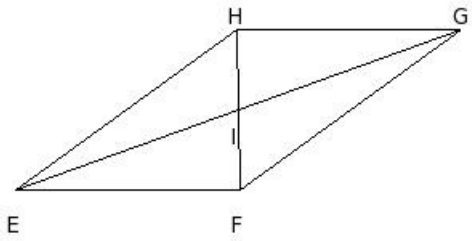
   (i) {b,a} (ii) {b,a,c} (iii) {a,c,d} (iv) {b,e,d} (v) {e,c}

2. In parallelogram GHIJ, diagonals $\overline{HJ}$ and $\overline{GI}$ intersect at K. Then $\overline{GH} \parallel$



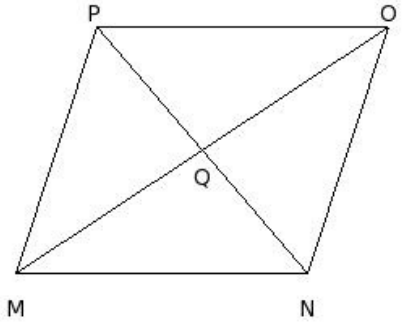
   (i) $\overline{HJ}$ (ii) $\overline{JG}$ (iii) $\overline{HI}$ (iv) $\overline{IJ}$ (v) $\overline{GI}$

3. In parallelogram EFGH, diagonals $\overline{FH}$ and $\overline{EG}$ intersect at I. Then $\overline{GH} \parallel$



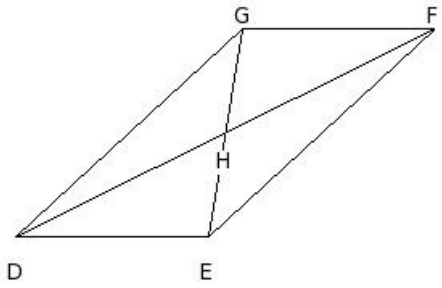
   (i) $\overline{HE}$ (ii) $\overline{FH}$ (iii) $\overline{FG}$ (iv) $\overline{EF}$ (v) $\overline{EG}$

4. In parallelogram MNOP, diagonals $\overline{NP}$ and $\overline{MO}$ intersect at Q. Then $\overline{PM}$ ∥



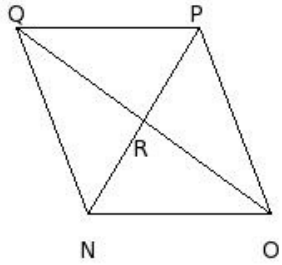
(i) $\overline{MO}$ (ii) $\overline{MN}$ (iii) $\overline{NP}$ (iv) $\overline{NO}$ (v) $\overline{OP}$

5. In parallelogram DEFG, diagonals $\overline{EG}$ and $\overline{DF}$ intersect at H. Then $\overline{EF}$ ∥



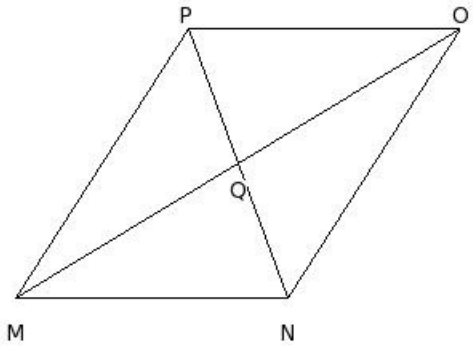
(i) $\overline{GD}$ (ii) $\overline{DE}$ (iii) $\overline{FG}$ (iv) $\overline{EG}$ (v) $\overline{DF}$

6. In parallelogram NOPQ, diagonals $\overline{OQ}$ and $\overline{NP}$ intersect at R. Then NO =



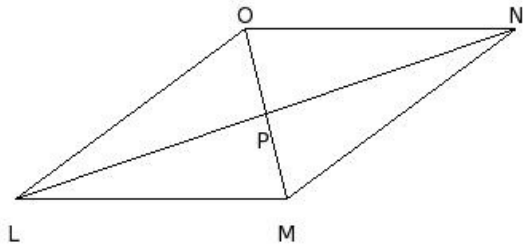
(i) OP (ii) PQ (iii) NP (iv) OQ (v) QN

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



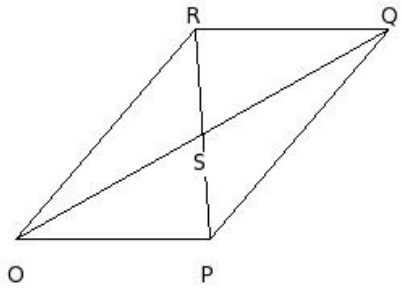
(i) MO (ii) NP (iii) PM (iv) MN (v) NO

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



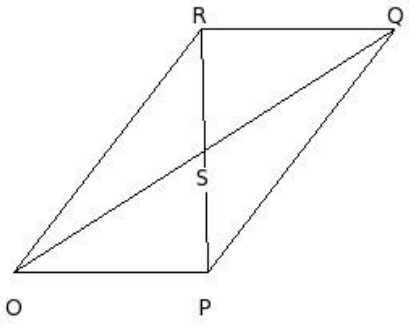
(i) NO (ii) LN (iii) LM (iv) MN (v) MO

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



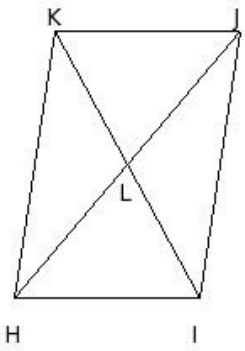
(i) OP (ii) PR (iii) QR (iv) RO (v) OQ

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



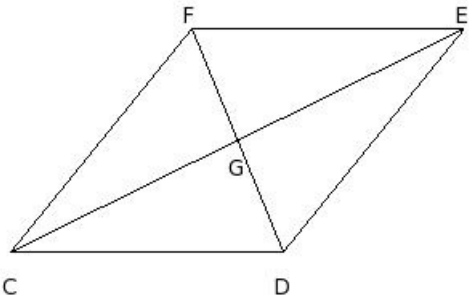
(i) $\triangle QRO$ (ii) $\triangle PQR$ (iii) $\triangle QRS$ (iv) $\triangle OPQ$ (v) $\triangle OPS$

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



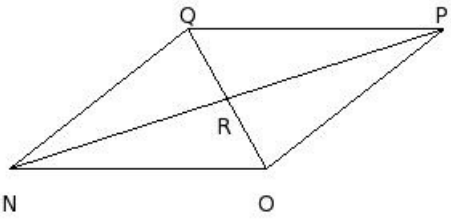
(i) $\triangle HIJ$ (ii) $\triangle KHI$ (iii) $\triangle JKH$ (iv) $\triangle JKL$ (v) $\triangle HIL$

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



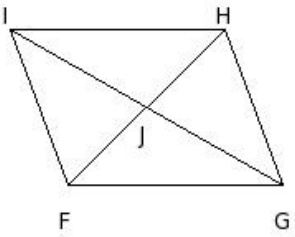
(i) $\triangle FCD$ (ii) $\triangle CDG$ (iii) $\triangle DEF$ (iv) $\triangle EFG$ (v) $\triangle CDE$

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



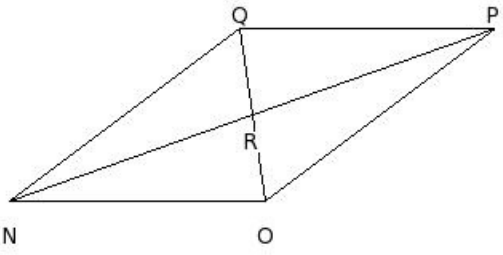
(i) $\triangle OPQ$ (ii) $\triangle QNO$ (iii) $\triangle PQN$ (iv) $\triangle PQR$ (v) $\triangle NOR$

14. In parallelogram FGHI, diagonals $\overline{GI}$ and $\overline{FH}$ intersect at J. Then $\angle IFG =$



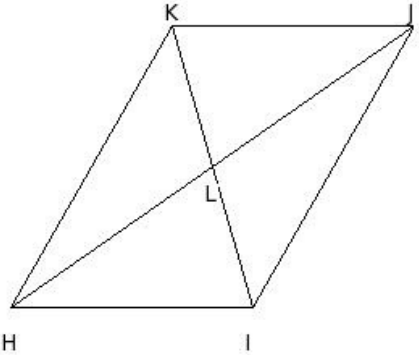
(i) $\angle HIF$ (ii) $\angle FGJ$ (iii) $\angle FGH$ (iv) $\angle HIJ$ (v) $\angle GHI$

15. In parallelogram NOPQ, diagonals $\overline{OQ}$ and $\overline{NP}$ intersect at R. Then $\angle OPQ =$



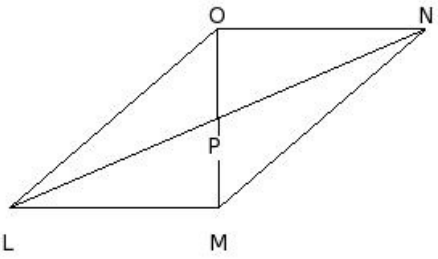
(i) $\angle PQN$ (ii) $\angle PQR$ (iii) $\angle QNO$ (iv) $\angle NOR$ (v) $\angle NOP$

16. In parallelogram HIJK, diagonals $\overline{IK}$ and $\overline{HJ}$ intersect at L. Then $\angle HIJ =$



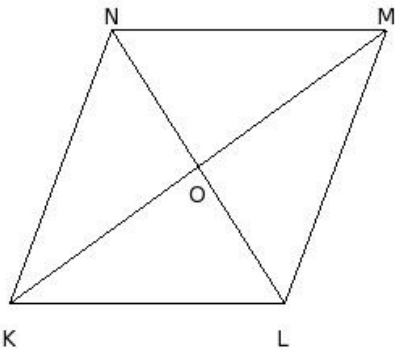
(i) $\angle KHI$ (ii) $\angle HIL$ (iii) $\angle JKL$ (iv) $\angle IJK$ (v) $\angle JKH$

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



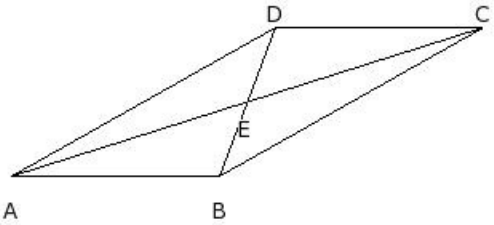
(i) $\angle LMP$ (ii) $\angle MNO$ (iii) $\angle LMN$ (iv) $\angle NOP$ (v) $\angle OLM$

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



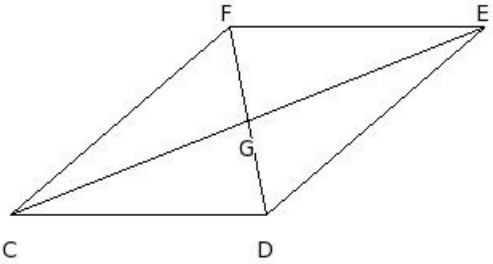
(i) NO (ii) LM (iii) LO (iv) KO (v) NK

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



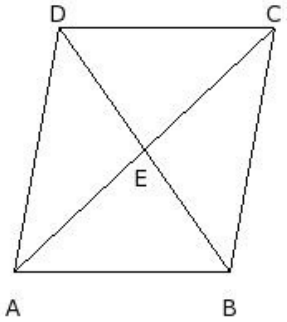
(i) BC (ii) BE (iii) CE (iv) DE (v) DA

20. In parallelogram CDEF, diagonals $\overline{DF}$ and $\overline{CE}$ intersect at G. Then FG =



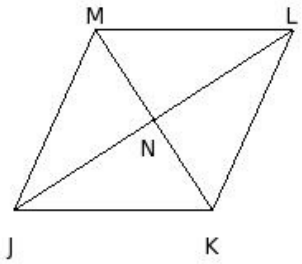
(i) DG (ii) CG (iii) DE (iv) EG (v) FC

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



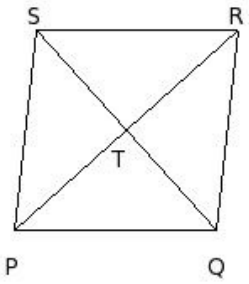
(i) DA (ii) BC (iii) AE (iv) DE (v) CE

22. In rhombus JKLM, diagonals $\overline{JL}$ and $\overline{KM}$ intersect at N. Then $\overline{JK} \parallel$



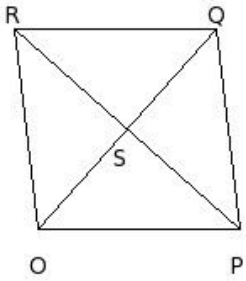
(i) $\overline{KM}$ (ii) $\overline{KL}$ (iii) $\overline{MJ}$ (iv) $\overline{LM}$

23. In rhombus PQRS, diagonals $\overline{PR}$ and $\overline{QS}$ intersect at T. Then $\overline{RS} \parallel$



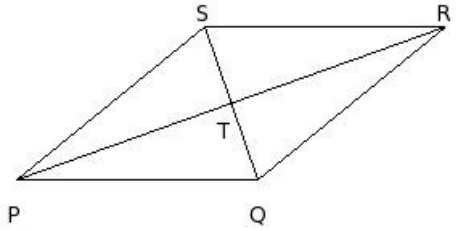
(i) $\overline{QS}$ (ii) $\overline{QR}$ (iii) $\overline{PQ}$ (iv) $\overline{SP}$

24. In rhombus OPQR, diagonals $\overline{OQ}$ and $\overline{PR}$ intersect at S. Then $\overline{RO} \parallel$



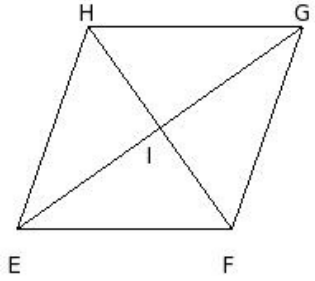
(i) $\overline{PQ}$ (ii) $\overline{OP}$ (iii) $\overline{QR}$ (iv) $\overline{PR}$

25. In rhombus PQRS, diagonals $\overline{PR}$ and $\overline{QS}$ intersect at T. Then $\overline{QR} \parallel$



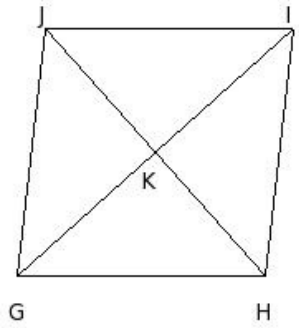
(i) $\overline{SP}$ (ii) $\overline{PQ}$ (iii) $\overline{QS}$ (iv) $\overline{RS}$

26. In rhombus EFGH, diagonals $\overline{EG}$ and $\overline{FH}$ intersect at I. Then $EF \neq$



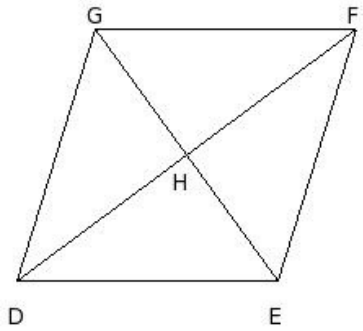
(i) GH (ii) FH (iii) FG (iv) HE

27. In rhombus GHIJ, diagonals $\overline{GI}$ and $\overline{HJ}$ intersect at K. Then $IJ \neq$



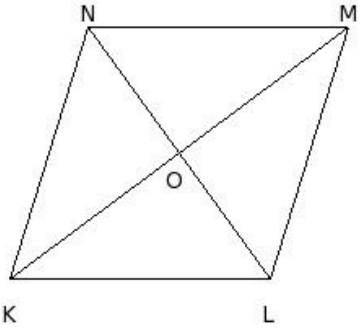
(i) JG (ii) HJ (iii) HI (iv) GH

28. In rhombus DEFG, diagonals $\overline{DF}$ and $\overline{EG}$ intersect at H. Then $GD \neq$



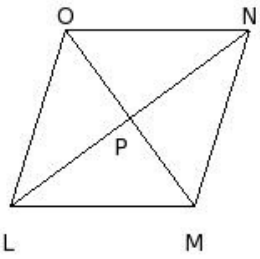
(i) EF (ii) FG (iii) EG (iv) DE

29. In rhombus KLMN, diagonals $\overline{KM}$ and $\overline{LN}$ intersect at O. Then LM ≠



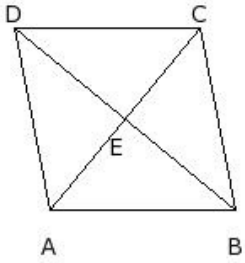
(i) KL (ii) LN (iii) MN (iv) NK

30. In rhombus LMNO, diagonals $\overline{LN}$ and $\overline{MO}$ intersect at P. Then △OLM ≅



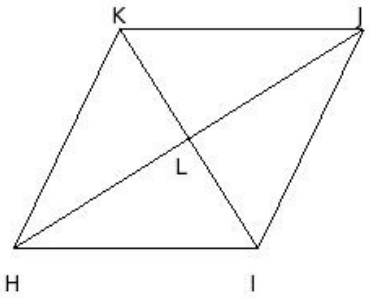
(i) △LMN (ii) △PLM (iii) △MNO (iv) △NOL

31. In rhombus ABCD, diagonals $\overline{AC}$ and $\overline{BD}$ intersect at E. Then △BCD ≅



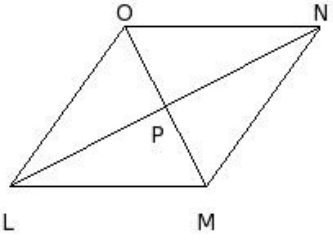
(i) △DAB (ii) △EAB (iii) △CDA (iv) △ABC

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



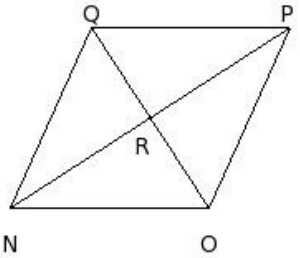
(i) △HIJ (ii) △LHI (iii) △IJK (iv) △KHI

33. In rhombus LMNO, diagonals $\overline{LN}$ and $\overline{MO}$ intersect at P. Then △LMN ≅



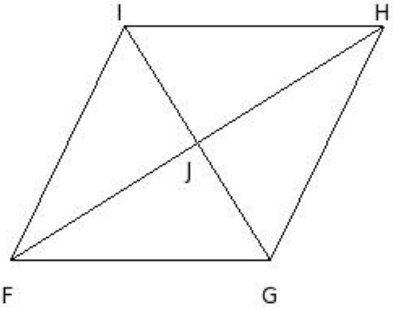
(i) △OLM (ii) △NOL (iii) △MNO (iv) △PLM

34. In rhombus NOPQ, diagonals $\overline{NP}$ and $\overline{OQ}$ intersect at R. Then $\triangle RNO \ncong$



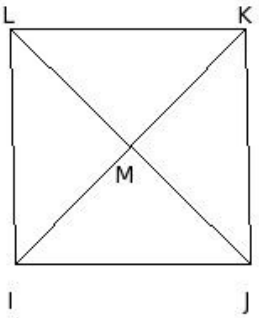
(i) $\triangle QNO$ (ii) $\triangle RPO$ (iii) $\triangle RPQ$ (iv) $\triangle RNQ$

35. In rhombus FGHI, diagonals $\overline{FH}$ and $\overline{GI}$ intersect at J. Then $\triangle JHG \ncong$



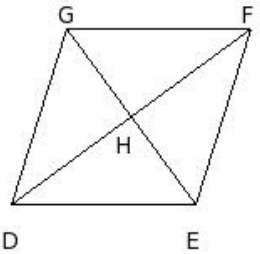
(i) $\triangle IFG$ (ii) $\triangle JHI$ (iii) $\triangle JFI$ (iv) $\triangle JFG$

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



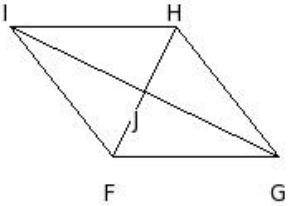
(i) $\triangle MIL$ (ii) $\triangle MKJ$ (iii) $\triangle LIJ$ (iv) $\triangle MIJ$

37. In rhombus DEFG, diagonals $\overline{DF}$ and $\overline{EG}$ intersect at H. Then $\triangle HDG \ncong$



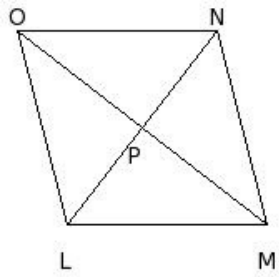
(i) $\triangle GDE$ (ii) $\triangle HDE$ (iii) $\triangle HFG$ (iv) $\triangle HFE$

38. In rhombus FGHI, diagonals $\overline{FH}$ and $\overline{GI}$ intersect at J. Then $\angle IFG =$



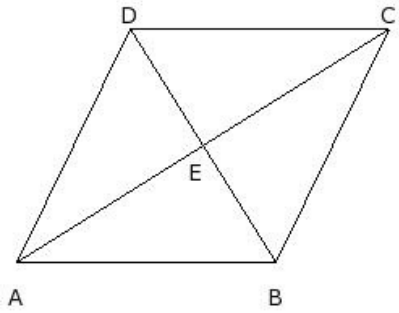
(i) $\angle GHI$ (ii) $\angle FGJ$ (iii) $\angle HIF$ (iv) $\angle FGH$

39. In rhombus LMNO, diagonals $\overline{LN}$ and $\overline{MO}$ intersect at P. Then $\angle MNO =$



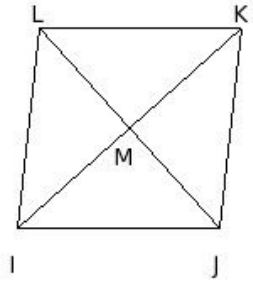
(i) $\angle LMN$ (ii) $\angle LMP$ (iii) $\angle OLM$ (iv) $\angle NOL$

40. In rhombus ABCD, diagonals $\overline{AC}$ and $\overline{BD}$ intersect at E. Then $\angle ABC =$



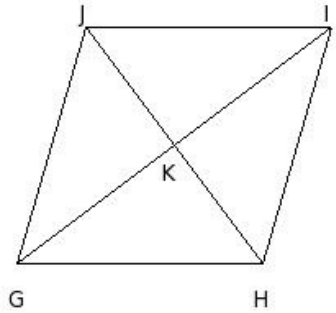
(i) $\angle DAB$ (ii) $\angle ABE$ (iii) $\angle CDA$ (iv) $\angle BCD$

41. In rhombus IJKL, diagonals $\overline{IK}$ and $\overline{JL}$ intersect at M. Then $\angle KLI =$



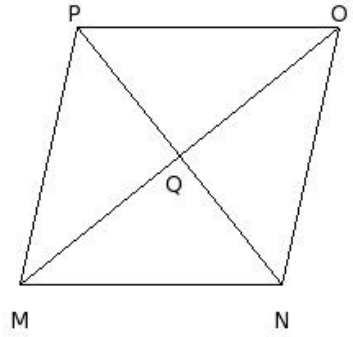
(i) $\angle JKL$ (ii) $\angle IJM$ (iii) $\angle LIJ$ (iv) $\angle IJK$

42. In rhombus GHIJ, diagonals $\overline{GI}$ and $\overline{HJ}$ intersect at K. Then $\angle HKG \neq$



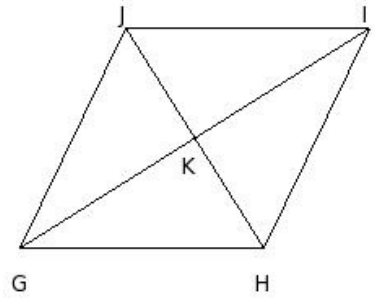
(i) $\angle IKH$ (ii) $\angle JKI$ (iii) $\angle GKJ$ (iv) $\angle JGH$

43. In rhombus MNOP, diagonals $\overline{MO}$ and $\overline{NP}$ intersect at Q. Then $\angle PQO \neq$



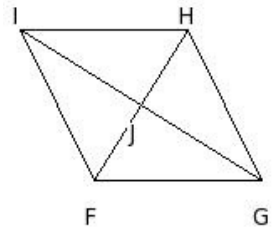
(i) $\angle PMN$ (ii) $\angle MQP$ (iii) $\angle OQN$ (iv) $\angle NQM$

44. In rhombus GHIJ, diagonals $\overline{GI}$ and $\overline{HJ}$ intersect at K. Then $\angle GKJ \neq$



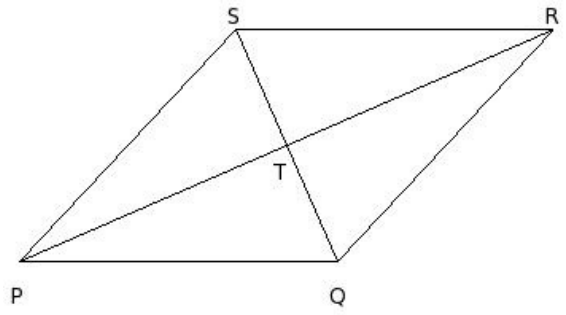
(i) $\angle HKG$ (ii) $\angle JGH$ (iii) $\angle IKH$ (iv) $\angle JKI$

45. In rhombus FGHI, diagonals $\overline{FH}$ and $\overline{GI}$ intersect at J. Then $\angle HJG \neq$



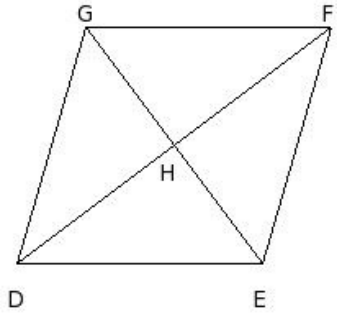
(i) $\angle GJF$ (ii) $\angle FJI$ (iii) $\angle IFG$ (iv) $\angle IJH$

46. In rhombus PQRS, diagonals $\overline{PR}$ and $\overline{QS}$ intersect at T. Then $\angle TPQ \neq$



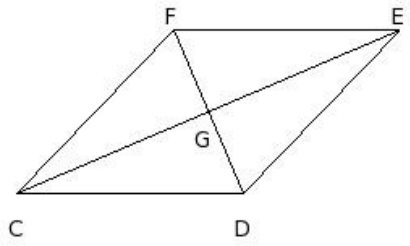
(i) $\angle PTS$ (ii) $\angle QRT$ (iii) $\angle SPT$ (iv) $\angle TRS$

47. In rhombus DEFG, diagonals $\overline{DF}$ and $\overline{EG}$ intersect at H. Then $\angle HFG \neq$



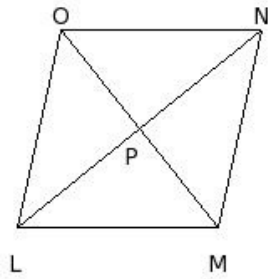
(i) $\angle GDH$ (ii) $\angle DHG$ (iii) $\angle EFH$ (iv) $\angle HDE$

48. In rhombus CDEF, diagonals $\overline{CE}$ and $\overline{DF}$ intersect at G. Then $\angle FCG \neq$



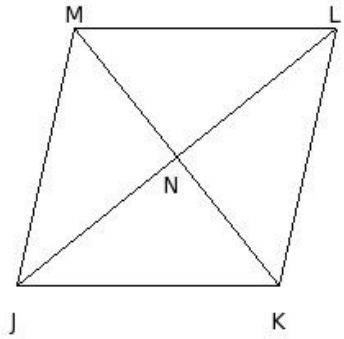
(i) $\angle GCD$ (ii) $\angle GEF$ (iii) $\angle CGF$ (iv) $\angle DEG$

49. In rhombus LMNO, diagonals $\overline{LN}$ and $\overline{MO}$ intersect at P. Then $\angle MNP \neq$



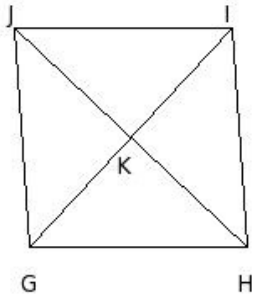
(i) $\angle PNO$ (ii) $\angle OLP$ (iii) $\angle PLM$ (iv) $\angle LPO$

50. In rhombus JKLM, diagonals $\overline{JL}$ and $\overline{KM}$ intersect at N. Then $\angle NMJ \neq$



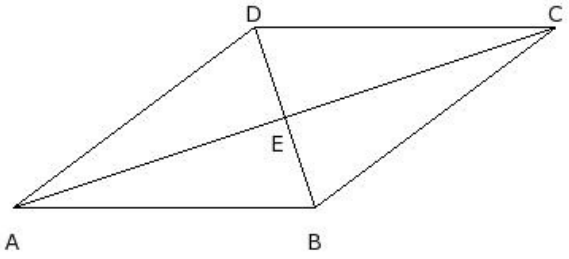
(i) $\angle LMN$ (ii) $\angle MNL$ (iii) $\angle JKN$ (iv) $\angle NKL$

51. In rhombus GHIJ, diagonals $\overline{GI}$ and $\overline{HJ}$ intersect at K. Then $\angle KHI \neq$



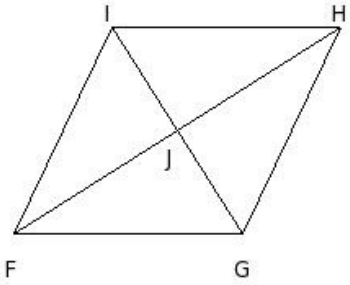
(i) $\angle KJG$ (ii) $\angle IJK$ (iii) $\angle JKI$ (iv) $\angle GHK$

52. In rhombus ABCD, diagonals $\overline{AC}$ and $\overline{BD}$ intersect at E. Then $\angle ABE \neq$



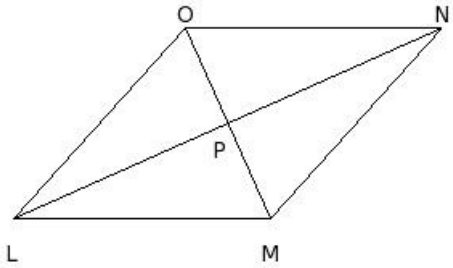
(i) $\angle EBC$ (ii) $\angle CDE$ (iii) $\angle DEC$ (iv) $\angle EDA$

53. In rhombus FGHI, diagonals $\overline{FH}$ and $\overline{GI}$ intersect at J. Then $\angle HIJ \neq$



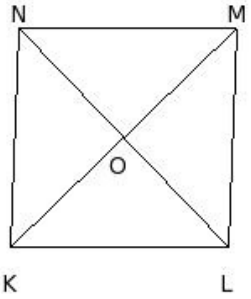
(i) $\angle JIF$ (ii) $\angle JGH$ (iii) $\angle IJH$ (iv) $\angle FGJ$

54. In rhombus LMNO, diagonals $\overline{LN}$ and $\overline{MO}$ intersect at P. Then OP =



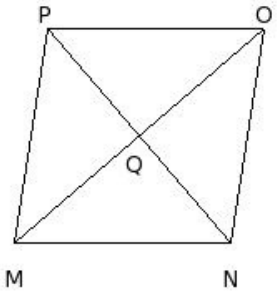
(i) NP (ii) OL (iii) MP (iv) LP

55. In rhombus KLMN, diagonals $\overline{KM}$ and $\overline{LN}$ intersect at O. Then LO =



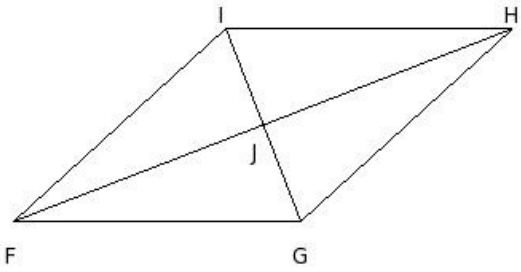
(i) KO (ii) MO (iii) NK (iv) NO

56. In rhombus MNOP, diagonals $\overline{MO}$ and $\overline{NP}$ intersect at Q. Then MQ =



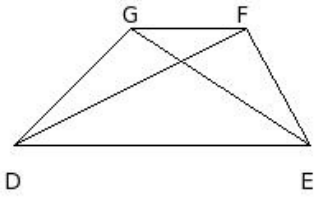
(i) OQ (ii) PQ (iii) PM (iv) NQ

57. In rhombus FGHI, diagonals $\overline{FH}$ and $\overline{GI}$ intersect at J. Then HJ =



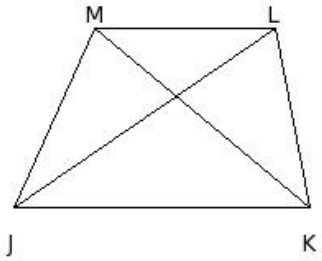
(i) FJ (ii) IF (iii) IJ (iv) GJ

58. In trapezium DEFG, $\overline{DF}$ and $\overline{EG}$ are diagonals. Then $\overline{DE}$ ∥



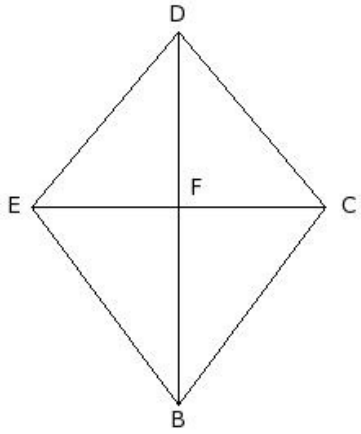
(i) $\overline{DF}$ (ii) $\overline{GD}$ (iii) $\overline{EG}$ (iv) $\overline{FG}$ (v) $\overline{EF}$

59. In trapezium JKLM, $\overline{JL}$ and $\overline{KM}$ are diagonals. Then $\overline{LM}$ ∥



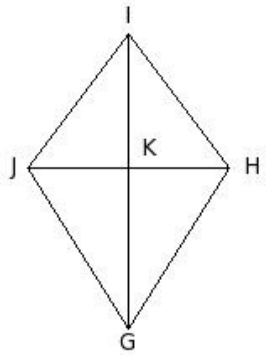
(i) $\overline{MJ}$ (ii) $\overline{KL}$ (iii) $\overline{JL}$ (iv) $\overline{JK}$ (v) $\overline{KM}$

60. In kite BCDE, $\overline{BD}$ and $\overline{CE}$ are diagonals. Then BC =



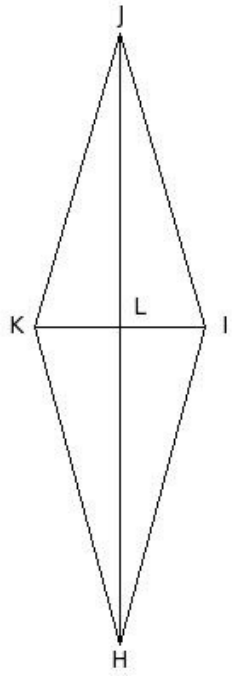
(i) BD (ii) EB (iii) DE (iv) CE (v) CD

61. In kite GHIJ, $\overline{GI}$ and $\overline{HJ}$ are diagonals. Then JG =



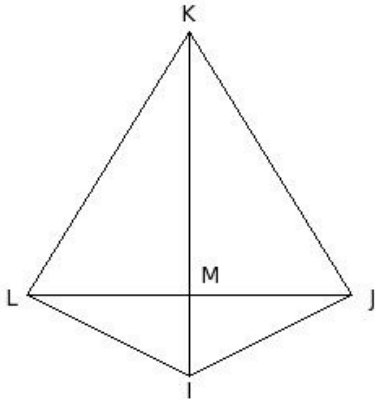
(i) IJ (ii) GH (iii) HJ (iv) HI (v) GI

62. In kite HIJK, $\overline{HJ}$ and $\overline{IK}$ are diagonals. Then IJ =



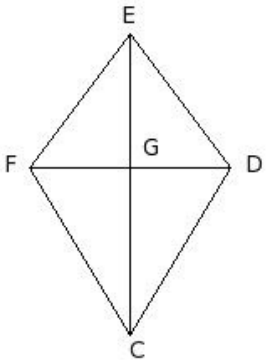
(i) IK (ii) HI (iii) JK (iv) KH (v) HJ

63. In kite IJKL, $\overline{IK}$ and $\overline{JL}$ are diagonals. Then KL =



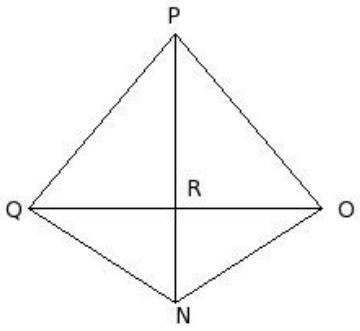
(i) LI (ii) IK (iii) JL (iv) JK (v) IJ

64. In kite CDEF, $\overline{CE}$ and $\overline{DF}$ are diagonals. Then ∠CDE =



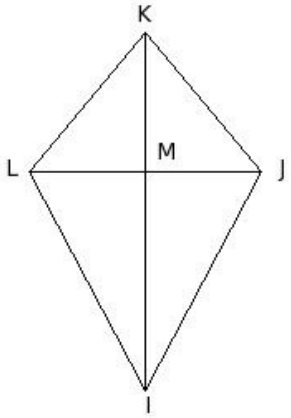
(i) ∠CGD (ii) ∠CGF (iii) ∠CFD (iv) ∠EFC (v) ∠EFD

65. In kite NOPQ, $\overline{NP}$ and $\overline{OQ}$ are diagonals. Then ∠PQN =



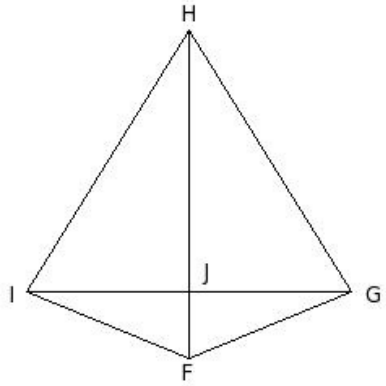
(i) ∠NOP (ii) ∠NRQ (iii) ∠NQO (iv) ∠NRO (v) ∠PQO

66. In kite IJKL, $\overline{IK}$ and $\overline{JL}$ are diagonals. Then ∠IML =



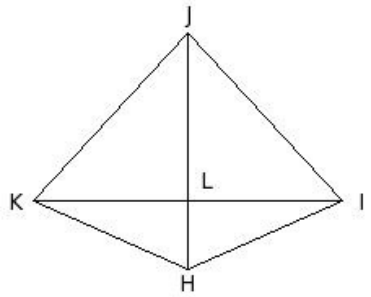
(i) ∠IMJ (ii) ∠KLJ (iii) ∠KLI (iv) ∠IJK (v) ∠ILJ

67. In kite FGHI, $\overline{FH}$ and $\overline{GI}$ are diagonals. Then $\angle FJG =$



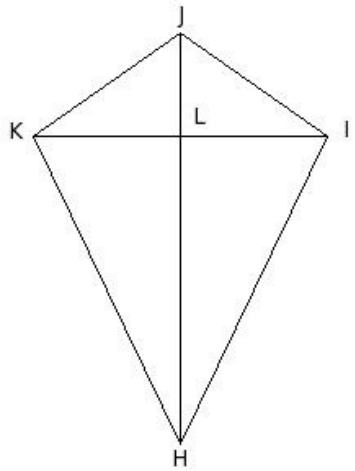
(i) $\angle FJI$ (ii) $\angle FIG$ (iii) $\angle HIG$ (iv) $\angle HIF$ (v) $\angle FGH$

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



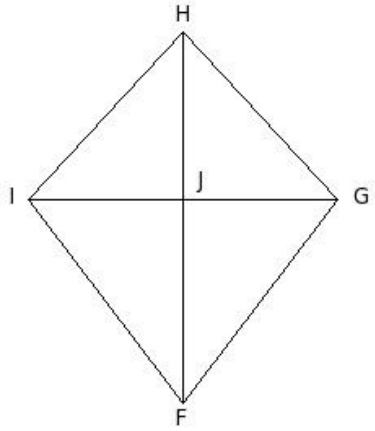
(i) $\triangle LJI$ (ii) $\triangle KIJ$ (iii) $\triangle LKH$ (iv) $\triangle JIH$ (v) $\triangle KIH$

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



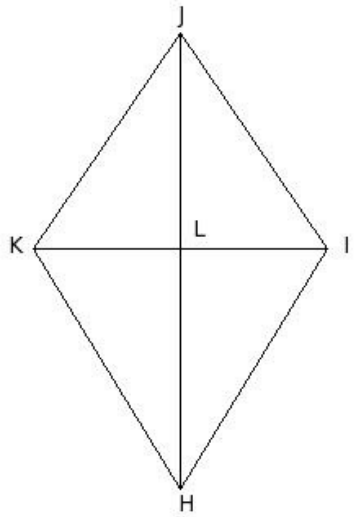
(i) $\triangle LKH$ (ii) $\triangle JKH$ (iii) $\triangle KIH$ (iv) $\triangle LJI$ (v) $\triangle KIJ$

70. In kite FGHI, $\overline{FH}$ and $\overline{GI}$ are diagonals. Then $\triangle JIF \cong$



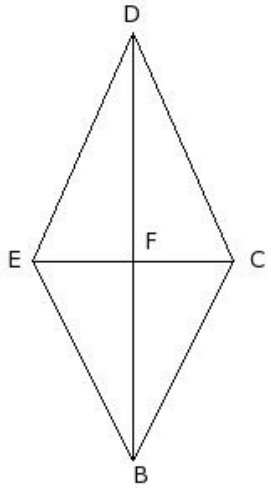
(i) $\triangle IGH$ (ii) $\triangle IGF$ (iii) $\triangle JHI$ (iv) $\triangle JHG$ (v) $\triangle JGF$

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



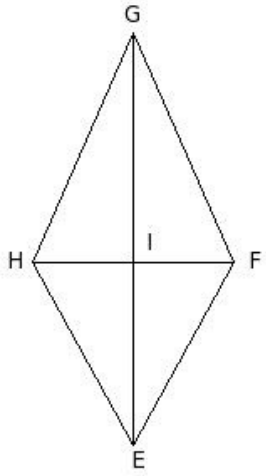
(i) $\triangle LJK$ (ii) $\triangle LKH$ (iii) $\triangle KIJ$ (iv) $\triangle LJI$ (v) $\triangle KIH$

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



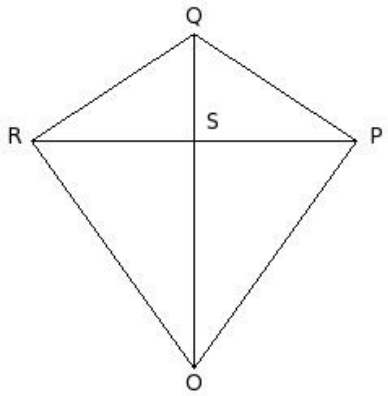
(i) $\triangle ECD$ (ii) $\triangle ECB$ (iii) $\triangle FCB$ (iv) $\triangle FDC$ (v) $\triangle FEB$

73. In kite EFGH, $\overline{EG}$ and $\overline{FH}$ are diagonals. Then $\triangle IGF \cong$



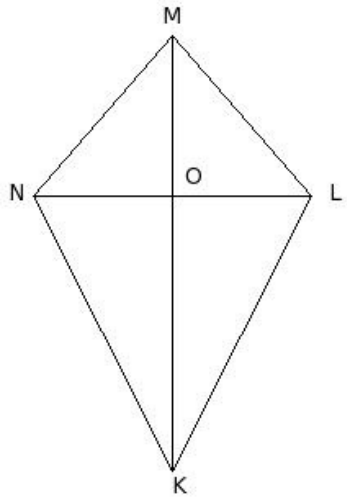
(i) $\triangle HFE$ (ii) $\triangle IGH$ (iii) $\triangle IFE$ (iv) $\triangle IHE$ (v) $\triangle HFG$

74. In kite OPQR, $\overline{OQ}$ and $\overline{PR}$ are diagonals. Then $\angle ROS =$



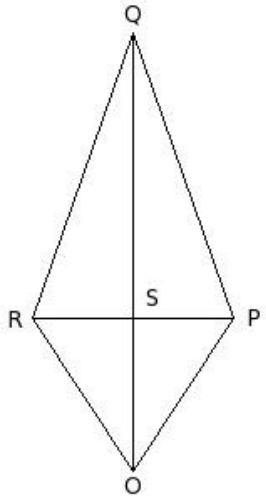
(i) $\angle SQR$ (ii) $\angle RSQ$ (iii) $\angle SQP$ (iv) $\angle OSR$ (v) $\angle POS$

75. In kite KLMN, $\overline{KM}$ and $\overline{LN}$ are diagonals. Then $\angle LKO =$



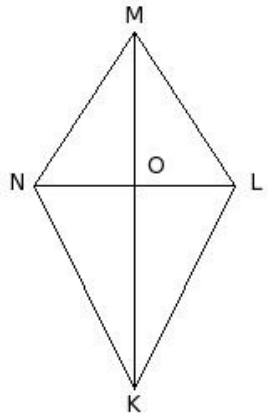
(i) $\angle KON$ (ii) $\angle NKO$ (iii) $\angle OML$ (iv) $\angle OMN$ (v) $\angle NOM$

76. In kite OPQR, $\overline{OQ}$ and $\overline{PR}$ are diagonals. Then ∠SQR =



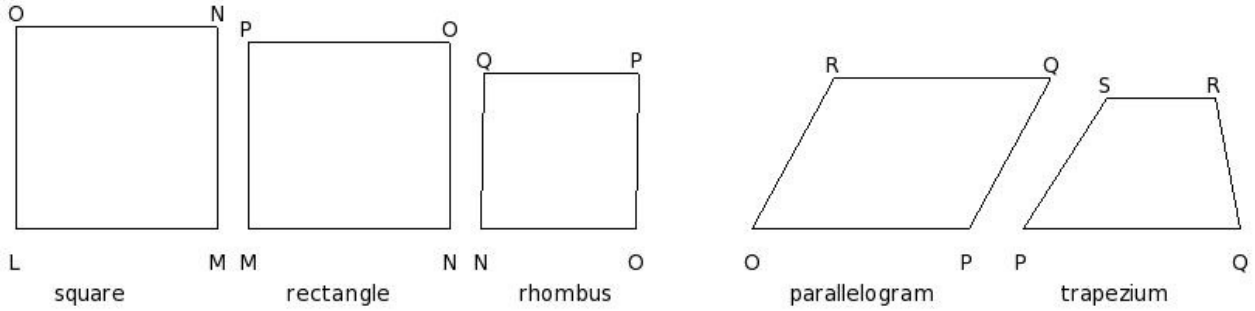
(i) ∠OSR (ii) ∠RSQ (iii) ∠POS (iv) ∠ROS (v) ∠SQP

77. In kite KLMN, $\overline{KM}$ and $\overline{LN}$ are diagonals. Then ∠OML =



(i) ∠LKO (ii) ∠KON (iii) ∠NKO (iv) ∠OMN (v) ∠NOM

78. Which of the following figures is a regular quadrilateral?



(i) parallelogram (ii) square (iii) trapezium (iv) rhombus (v) rectangle

Assignment Key

1) (iii)	2) (iv)	3) (iv)	4) (iv)	5) (i)	6) (ii)
7) (iv)	8) (iv)	9) (iv)	10) (ii)	11) (ii)	12) (v)
13) (iii)	14) (v)	15) (iii)	16) (v)	17) (iii)	18) (iv)
19) (iii)	20) (i)	21) (iv)	22) (iv)	23) (iii)	24) (i)
25) (i)	26) (ii)	27) (ii)	28) (iii)	29) (ii)	30) (iii)
31) (i)	32) (i)	33) (ii)	34) (i)	35) (i)	36) (iii)
37) (i)	38) (i)	39) (iii)	40) (iii)	41) (iv)	42) (iv)
43) (i)	44) (ii)	45) (iii)	46) (i)	47) (ii)	48) (iii)
49) (iv)	50) (ii)	51) (iii)	52) (iii)	53) (iii)	54) (iii)
55) (iv)	56) (i)	57) (i)	58) (iv)	59) (iv)	60) (ii)
61) (ii)	62) (iii)	63) (iv)	64) (iv)	65) (i)	66) (i)
67) (i)	68) (iv)	69) (ii)	70) (v)	71) (ii)	72) (iv)
73) (ii)	74) (v)	75) (ii)	76) (v)	77) (iv)	78) (ii)