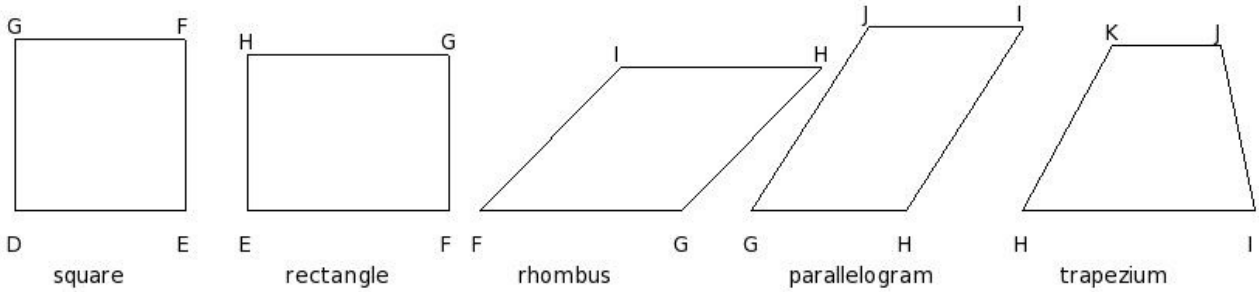
EduSahara™ Assignment

Name : Quadrilateral Properties Using Diagrams

Chapter : Understanding Quadrilaterals

Grade : CBSE Grade VIII

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



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

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

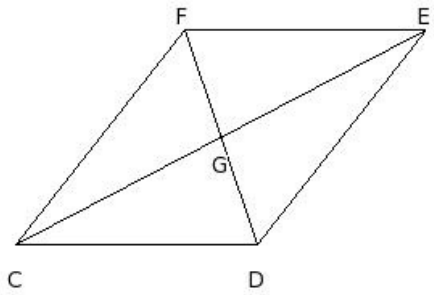
a) DG = GC

b) G is the mid point of $\overline{DF}$

c) △DFC ≅ △EFC

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

e) DG = FG



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

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

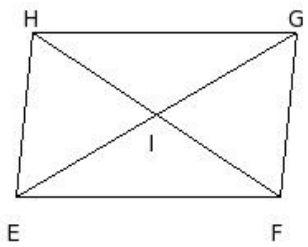
a) △FHE ≅ △GHE

b) I is the mid point of $\overline{FH}$

c) FI = IE

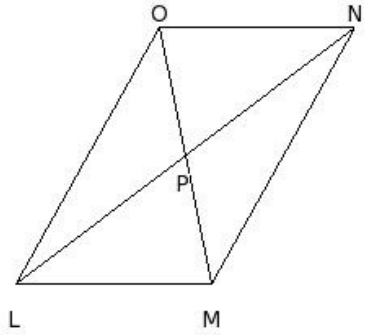
d) ∠FGH = ∠HEF

e) △IEF ≅ △IGH



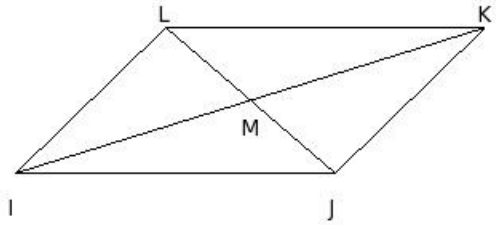
(i) {a,b,d} (ii) {b,d,e} (iii) {c,d} (iv) {a,c,e} (v) {a,b}

4. In parallelogram LMNO, diagonals $\overline{MO}$ and $\overline{LN}$ intersect at P. Then $\overline{LM}$ ∥



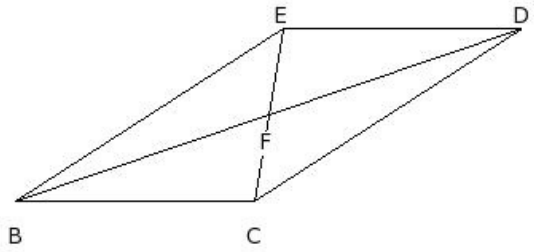
(i) $\overline{NO}$ (ii) $\overline{OL}$ (iii) $\overline{LN}$ (iv) $\overline{MN}$ (v) $\overline{MO}$

5. In parallelogram IJKL, diagonals $\overline{JL}$ and $\overline{IK}$ intersect at M. Then $\overline{KL}$ ∥



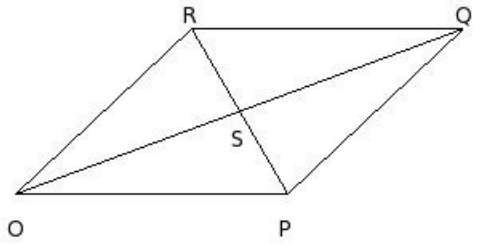
(i) $\overline{JL}$ (ii) $\overline{LI}$ (iii) $\overline{IJ}$ (iv) $\overline{JK}$ (v) $\overline{IK}$

6. In parallelogram BCDE, diagonals $\overline{CE}$ and $\overline{BD}$ intersect at F. Then $\overline{EB}$ ∥



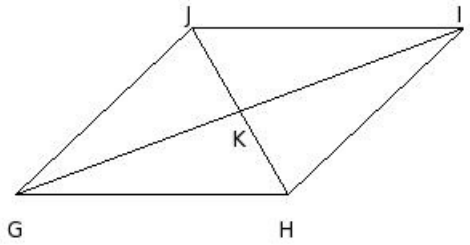
(i) $\overline{CE}$ (ii) $\overline{BD}$ (iii) $\overline{BC}$ (iv) $\overline{DE}$ (v) $\overline{CD}$

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



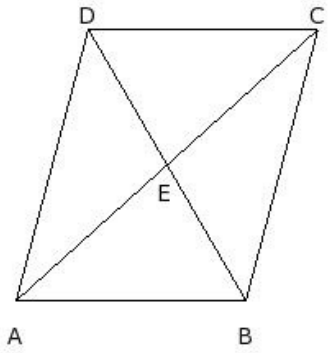
(i) $\overline{OP}$ (ii) $\overline{QR}$ (iii) $\overline{OQ}$ (iv) $\overline{RO}$ (v) $\overline{PR}$

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



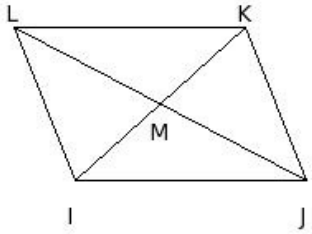
(i) JG (ii) IJ (iii) HJ (iv) GI (v) HI

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



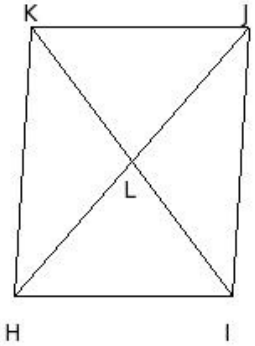
(i) DA (ii) BC (iii) AB (iv) BD (v) AC

10. In parallelogram IJKL, diagonals $\overline{JL}$ and $\overline{IK}$ intersect at M. Then LI =



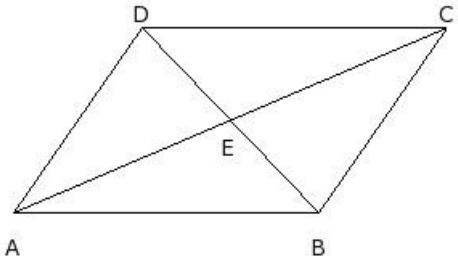
(i) IJ (ii) IK (iii) KL (iv) JK (v) JL

11. In parallelogram HIJK, diagonals $\overline{IK}$ and $\overline{HJ}$ intersect at L. Then IJ =



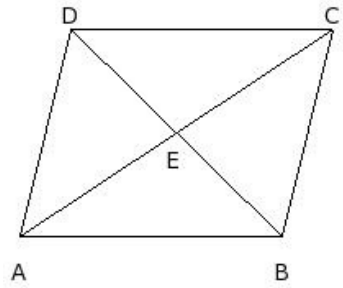
(i) HJ (ii) IK (iii) HI (iv) JK (v) KH

12. In parallelogram ABCD, diagonals $\overline{BD}$ and $\overline{AC}$ intersect at E. Then $\triangle DAB \cong$



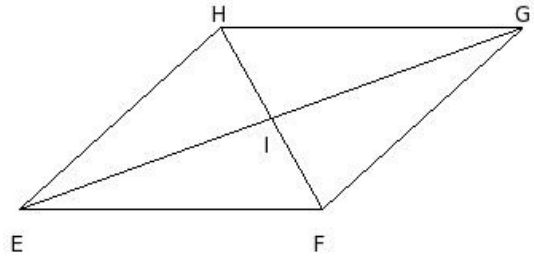
(i) $\triangle CDE$ (ii) $\triangle BCD$ (iii) $\triangle ABE$ (iv) $\triangle CDA$ (v) $\triangle ABC$

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



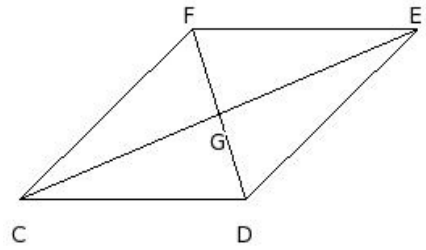
(i) $\triangle ABE$ (ii) $\triangle DAB$ (iii) $\triangle ABC$ (iv) $\triangle CDA$ (v) $\triangle CDE$

14. In parallelogram EFGH, diagonals $\overline{FH}$ and $\overline{EG}$ intersect at I. Then $\triangle GHE \cong$



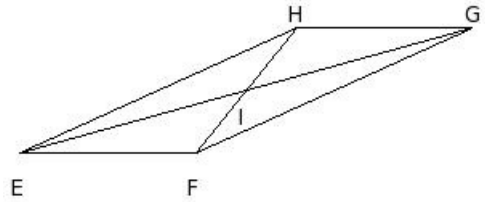
(i) $\triangle EFG$ (ii) $\triangle GHI$ (iii) $\triangle EFI$ (iv) $\triangle HEF$ (v) $\triangle FGH$

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



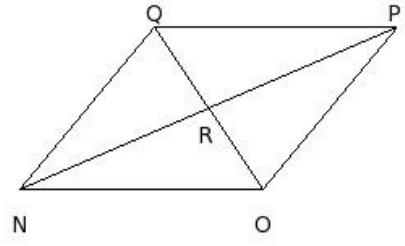
(i) $\triangle FCD$ (ii) $\triangle DEF$ (iii) $\triangle EFG$ (iv) $\triangle CDG$ (v) $\triangle EFC$

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



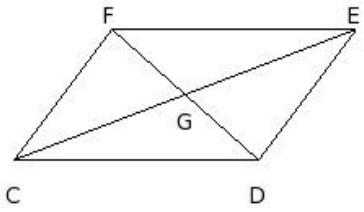
(i) $\angle EFG$ (ii) $\angle GHI$ (iii) $\angle EFI$ (iv) $\angle GHE$ (v) $\angle FGH$

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



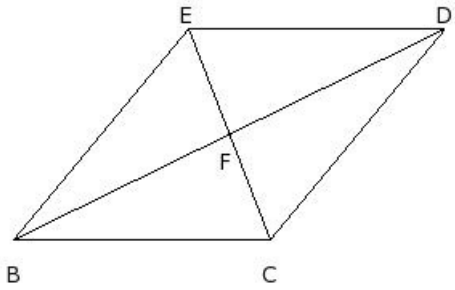
(i) $\angle PQR$ (ii) $\angle NOP$ (iii) $\angle PQN$ (iv) $\angle NOR$ (v) $\angle QNO$

18. In parallelogram CDEF, diagonals $\overline{DF}$ and $\overline{CE}$ intersect at G. Then $\angle CDE$ =



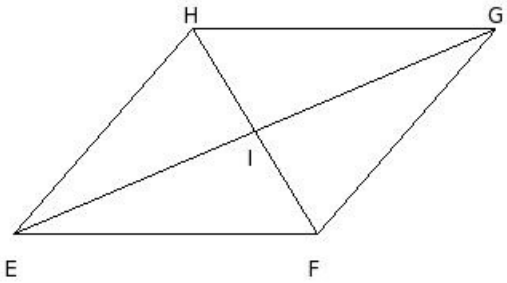
(i) $\angle DEF$ (ii) $\angle CDG$ (iii) $\angle EFG$ (iv) $\angle EFC$ (v) $\angle FCD$

19. In parallelogram BCDE, diagonals $\overline{CE}$ and $\overline{BD}$ intersect at F. Then $\angle DEB$ =



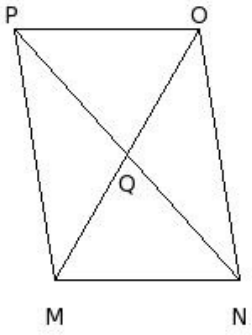
(i) $\angle DEF$ (ii) $\angle CDE$ (iii) $\angle BCD$ (iv) $\angle BCF$ (v) $\angle EBC$

20. In parallelogram EFGH, diagonals $\overline{FH}$ and $\overline{EG}$ intersect at I. Then GI =



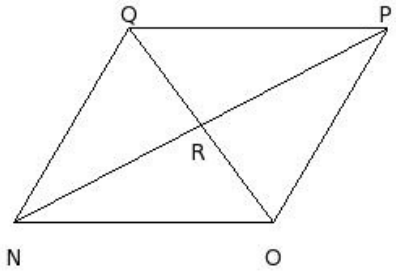
(i) EI (ii) HE (iii) HI (iv) FG (v) FI

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



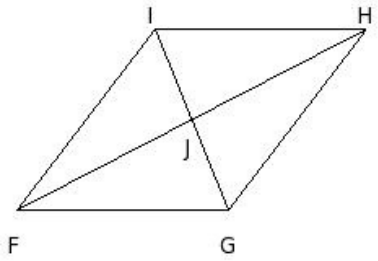
(i) NQ (ii) PQ (iii) NO (iv) PM (v) OQ

22. In parallelogram NOPQ, diagonals $\overline{OQ}$ and $\overline{NP}$ intersect at R. Then QR =



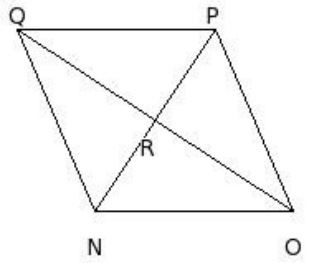
(i) OR (ii) PR (iii) NR (iv) OP (v) QN

23. In parallelogram FGHI, diagonals $\overline{GI}$ and $\overline{FH}$ intersect at J. Then GJ =



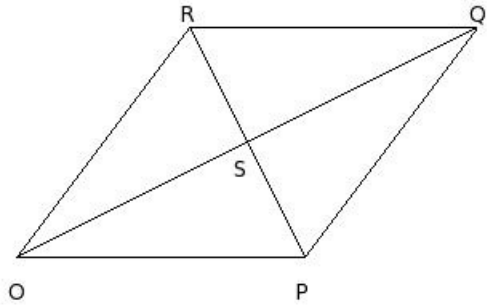
(i) IF (ii) GH (iii) IJ (iv) FJ (v) HJ

24. In rhombus NOPQ, diagonals $\overline{NP}$ and $\overline{OQ}$ intersect at R. Then $\overline{NO} \parallel$



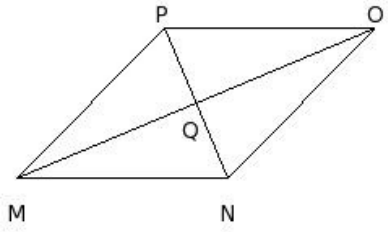
(i) $\overline{PQ}$ (ii) $\overline{QN}$ (iii) $\overline{OQ}$ (iv) $\overline{OP}$

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



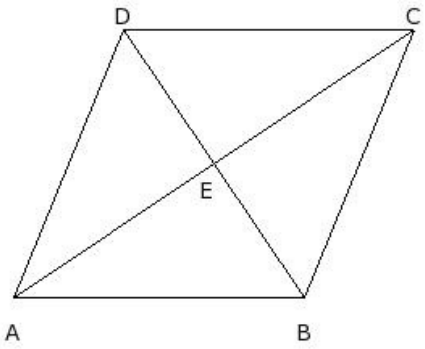
(i) $\overline{PQ}$ (ii) $\overline{OP}$ (iii) $\overline{RO}$ (iv) $\overline{PR}$

26. In rhombus MNOP, diagonals $\overline{MO}$ and $\overline{NP}$ intersect at Q. Then $\overline{PM} \parallel$



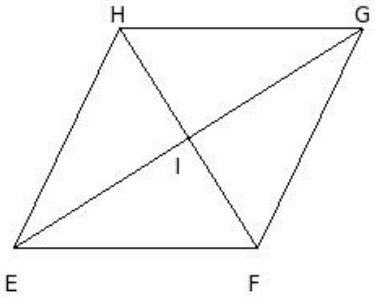
(i) $\overline{MN}$ (ii) $\overline{NO}$ (iii) $\overline{NP}$ (iv) $\overline{OP}$

27. In rhombus ABCD, diagonals $\overline{AC}$ and $\overline{BD}$ intersect at E. Then $\overline{BC} \parallel$



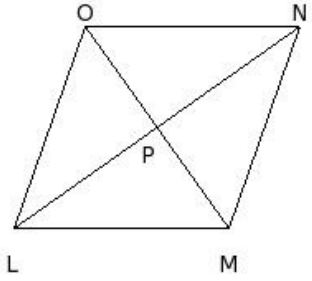
(i) $\overline{BD}$ (ii) $\overline{AB}$ (iii) $\overline{CD}$ (iv) $\overline{DA}$

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



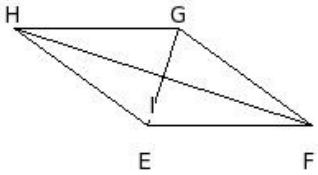
(i) GH (ii) HE (iii) FG (iv) FH

29. In rhombus LMNO, diagonals $\overline{LN}$ and $\overline{MO}$ intersect at P. Then $NO \neq$



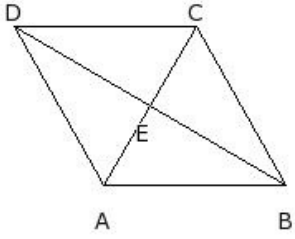
(i) MO (ii) MN (iii) LM (iv) OL

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



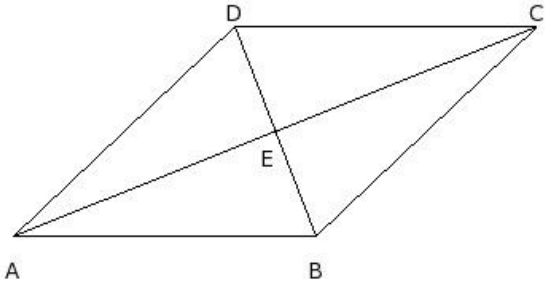
(i) EF (ii) FH (iii) GH (iv) FG

31. In rhombus ABCD, diagonals $\overline{AC}$ and $\overline{BD}$ intersect at E. Then $BC \neq$



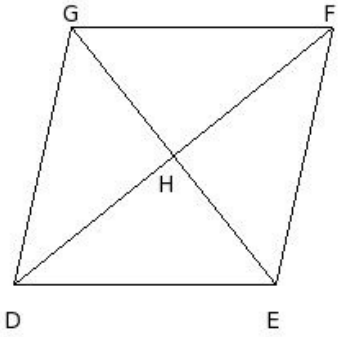
(i) BD (ii) DA (iii) AB (iv) CD

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



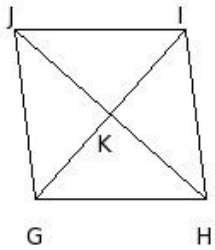
(i) $\triangle BCD$ (ii) $\triangle EAB$ (iii) $\triangle CDA$ (iv) $\triangle ABC$

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



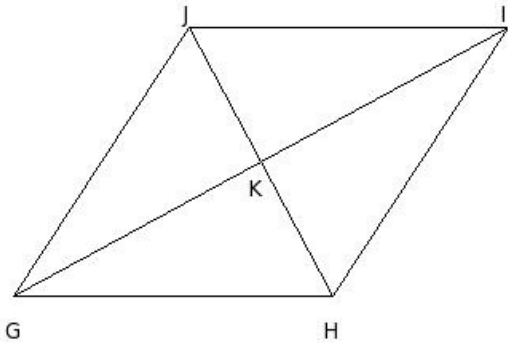
(i) $\triangle GDE$ (ii) $\triangle DEF$ (iii) $\triangle FGD$ (iv) $\triangle HDE$

34. In rhombus GHIJ, diagonals $\overline{GI}$ and $\overline{HJ}$ intersect at K. Then $\triangle IJG \cong$



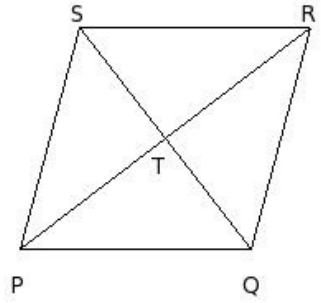
(i) $\triangle KGH$ (ii) $\triangle GHI$ (iii) $\triangle HIJ$ (iv) $\triangle JGH$

35. In rhombus GHIJ, diagonals $\overline{GI}$ and $\overline{HJ}$ intersect at K. Then $\triangle GHI \cong$



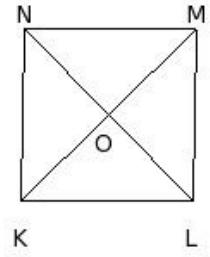
(i) $\triangle IJG$ (ii) $\triangle KGH$ (iii) $\triangle JGH$ (iv) $\triangle HIJ$

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



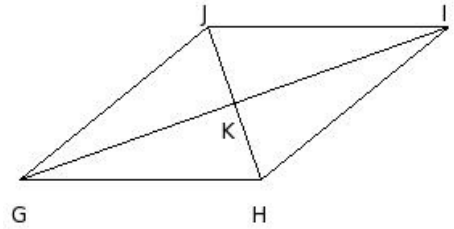
(i) $\triangle SPQ$ (ii) $\triangle TPS$ (iii) $\triangle TRQ$ (iv) $\triangle TRS$

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



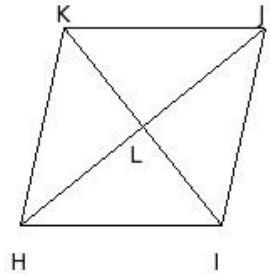
(i) $\triangle OMN$ (ii) $\triangle NKL$ (iii) $\triangle OKL$ (iv) $\triangle OKN$

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



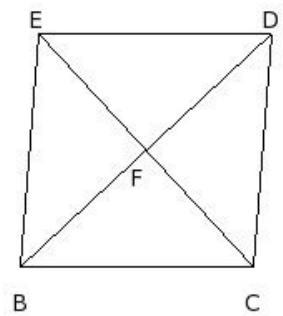
(i) $\triangle KGH$ (ii) $\triangle KGJ$ (iii) $\triangle JGH$ (iv) $\triangle KIH$

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



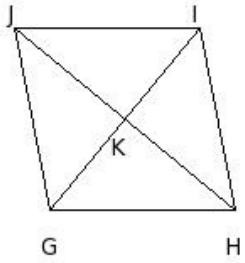
(i) $\triangle LHI$ (ii) $\triangle LJI$ (iii) $\triangle LJK$ (iv) $\triangle KHI$

40. In rhombus BCDE, diagonals $\overline{BD}$ and $\overline{CE}$ intersect at F. Then $\angle EBC =$



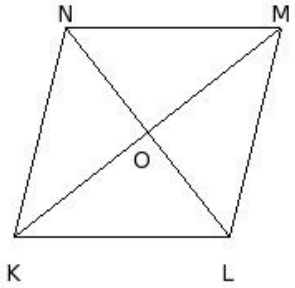
(i) $\angle DEB$ (ii) $\angle CDE$ (iii) $\angle BCD$ (iv) $\angle BCF$

41. In rhombus GHIJ, diagonals $\overline{GI}$ and $\overline{HJ}$ intersect at K. Then $\angle HIJ =$



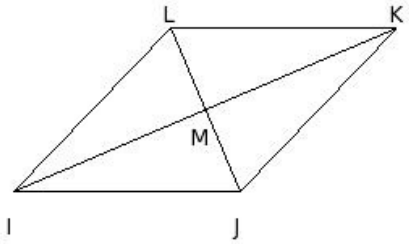
(i) $\angle GHI$ (ii) $\angle GHK$ (iii) $\angle JGH$ (iv) $\angle IJG$

42. In rhombus KLMN, diagonals $\overline{KM}$ and $\overline{LN}$ intersect at O. Then $\angle KLM =$



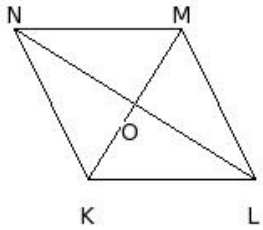
(i) $\angle LMN$ (ii) $\angle KLO$ (iii) $\angle NKL$ (iv) $\angle MNK$

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



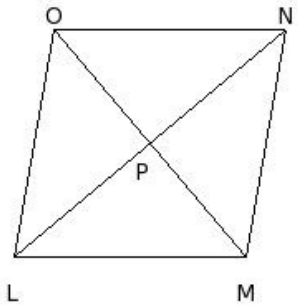
(i) $\angle JKL$ (ii) $\angle IJM$ (iii) $\angle LIJ$ (iv) $\angle IJK$

44. In rhombus KLMN, diagonals $\overline{KM}$ and $\overline{LN}$ intersect at O. Then $\angle LOK \neq$



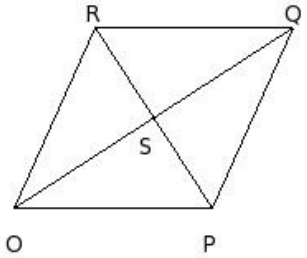
(i) $\angle NOM$ (ii) $\angle MOL$ (iii) $\angle KON$ (iv) $\angle NKL$

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



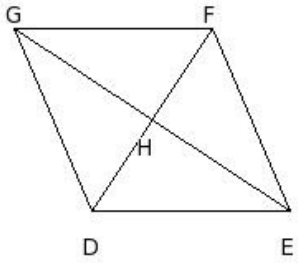
(i) $\angle LPO$ (ii) $\angle OLM$ (iii) $\angle NPM$ (iv) $\angle MPL$

46. In rhombus OPQR, diagonals $\overline{OQ}$ and $\overline{PR}$ intersect at S. Then $\angle OSR \neq$



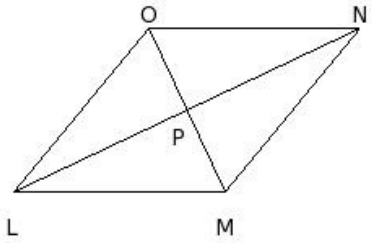
(i) $\angle ROP$ (ii) $\angle QSP$ (iii) $\angle PSO$ (iv) $\angle RSQ$

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



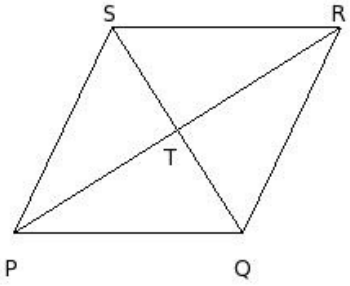
(i) $\angle GHF$ (ii) $\angle DHG$ (iii) $\angle EHD$ (iv) $\angle GDE$

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



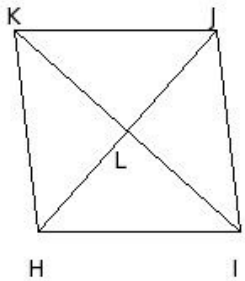
(i) $\angle PNO$ (ii) $\angle LPO$ (iii) $\angle OLP$ (iv) $\angle MNP$

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



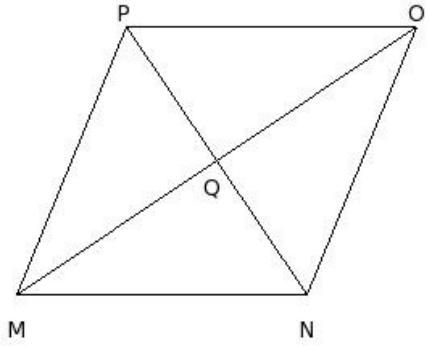
(i) $\angle SPT$ (ii) $\angle PTS$ (iii) $\angle TPQ$ (iv) $\angle QRT$

50. In rhombus HIJK, diagonals $\overline{HJ}$ and $\overline{IK}$ intersect at L. Then $\angle KHL \neq$



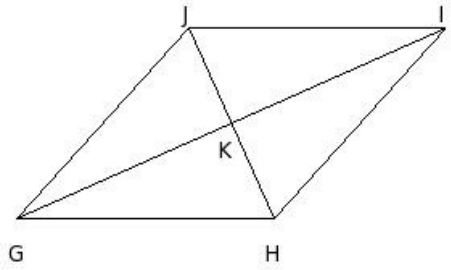
(i) $\angle IJL$ (ii) $\angle LHI$ (iii) $\angle LJK$ (iv) $\angle HLK$

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



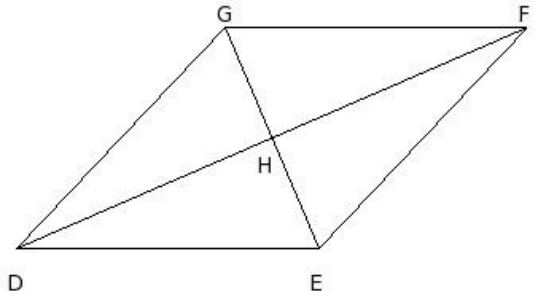
(i) $\angle QOP$ (ii) $\angle PMQ$ (iii) $\angle MQP$ (iv) $\angle QMN$

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



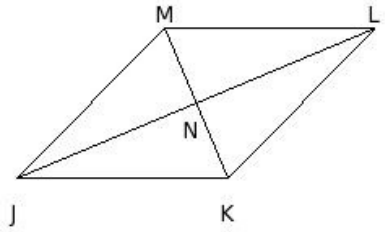
(i) $\angle JKI$ (ii) $\angle GHK$ (iii) $\angle IJK$ (iv) $\angle KHI$

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



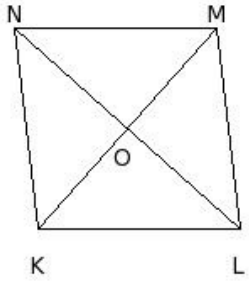
(i) $\angle HGD$ (ii) $\angle GHF$ (iii) $\angle FGH$ (iv) $\angle DEH$

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



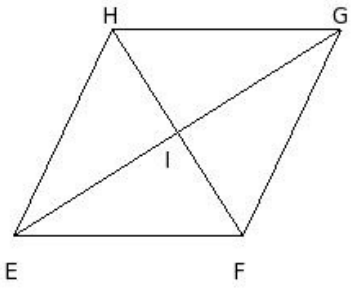
(i) $\angle MNL$ (ii) $\angle LMN$ (iii) $\angle NKL$ (iv) $\angle NMJ$

55. In rhombus KLMN, diagonals $\overline{KM}$ and $\overline{LN}$ intersect at O. Then $\angle MNO \neq$



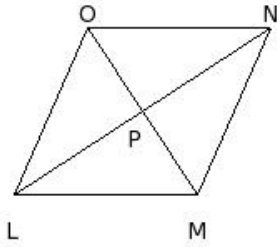
(i) $\angle ONK$ (ii) $\angle NOM$ (iii) $\angle OLM$ (iv) $\angle KLO$

56. In rhombus EFGH, diagonals $\overline{EG}$ and $\overline{FH}$ intersect at I. Then HI =



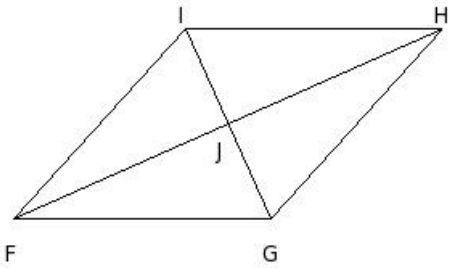
(i) EI (ii) HE (iii) FI (iv) GI

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



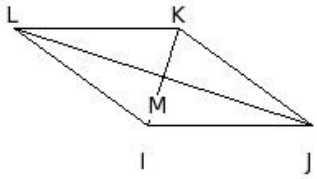
(i) OP (ii) LP (iii) NP (iv) OL

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



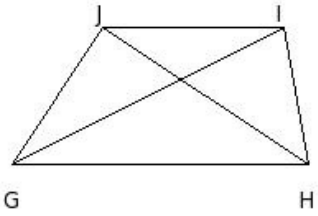
(i) HJ (ii) IF (iii) IJ (iv) GJ

59. In rhombus IJKL, diagonals $\overline{IK}$ and $\overline{JL}$ intersect at M. Then KM =



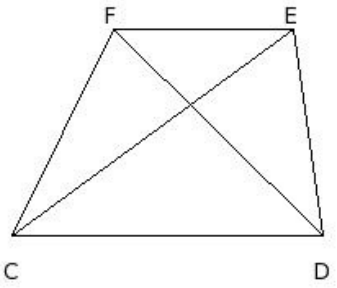
(i) LM (ii) LI (iii) JM (iv) IM

60. In trapezium GHIJ, $\overline{GI}$ and $\overline{HJ}$ are diagonals. Then $\overline{GH} \parallel$



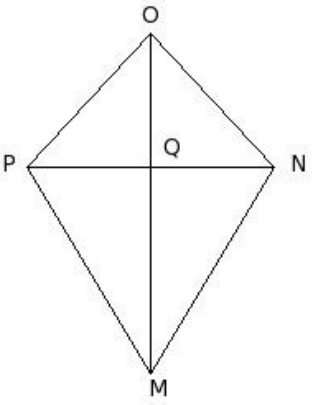
(i) $\overline{JG}$ (ii) $\overline{HJ}$ (iii) $\overline{GI}$ (iv) $\overline{IJ}$ (v) $\overline{HI}$

61. In trapezium CDEF, $\overline{CE}$ and $\overline{DF}$ are diagonals. Then $\overline{EF} \parallel$



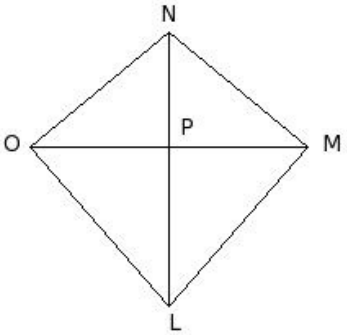
(i) $\overline{CD}$ (ii) $\overline{CE}$ (iii) $\overline{DE}$ (iv) $\overline{FC}$ (v) $\overline{DF}$

62. In kite MNOP, $\overline{MO}$ and $\overline{NP}$ are diagonals. Then MN =



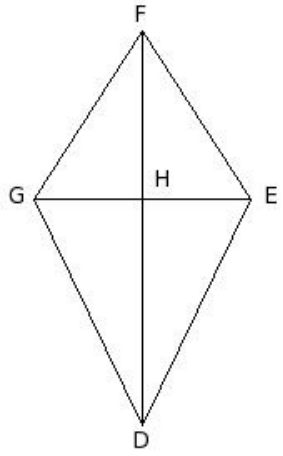
(i) NP (ii) OP (iii) NO (iv) PM (v) MO

63. In kite LMNO, $\overline{LN}$ and $\overline{MO}$ are diagonals. Then OL =



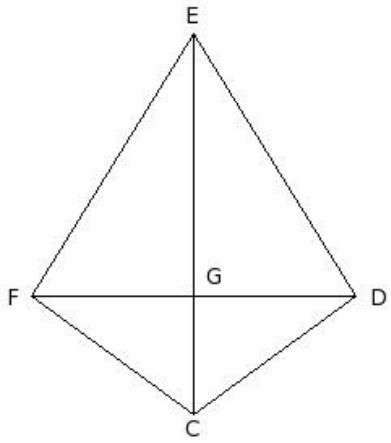
(i) LM (ii) MO (iii) LN (iv) MN (v) NO

64. In kite DEFG, $\overline{DF}$ and $\overline{EG}$ are diagonals. Then EF =



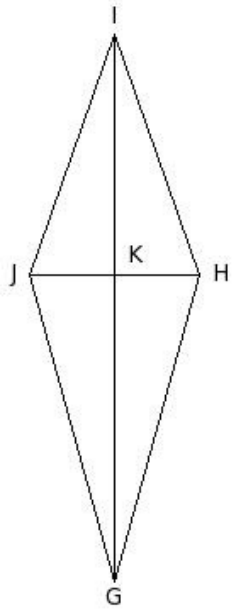
(i) GD (ii) DF (iii) DE (iv) EG (v) FG

65. In kite CDEF, $\overline{CE}$ and $\overline{DF}$ are diagonals. Then EF =



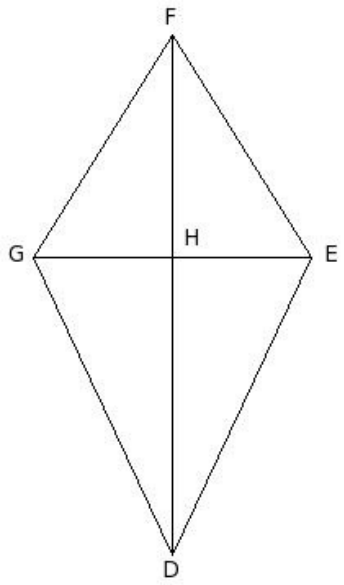
(i) CD (ii) FC (iii) DF (iv) DE (v) CE

66. In kite GHIJ, $\overline{GI}$ and $\overline{HJ}$ are diagonals. Then ∠GHI =



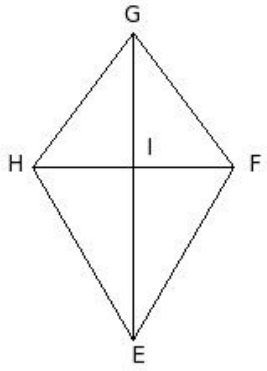
(i) ∠GKJ (ii) ∠GJH (iii) ∠IJG (iv) ∠IJH (v) ∠GKH

67. In kite DEFG, $\overline{DF}$ and $\overline{EG}$ are diagonals. Then $\angle FGD =$



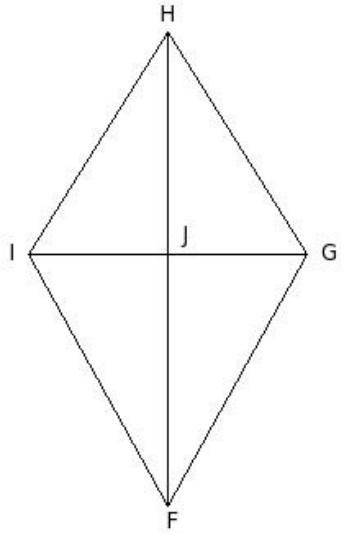
(i) $\angle DHE$ (ii) $\angle FGE$ (iii) $\angle DHG$ (iv) $\angle DGE$ (v) $\angle DEF$

68. In kite EFGH, $\overline{EG}$ and $\overline{FH}$ are diagonals. Then $\angle EIH =$



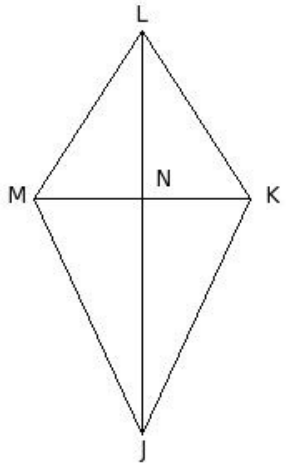
(i) $\angle GHE$ (ii) $\angle EIF$ (iii) $\angle EFG$ (iv) $\angle GHF$ (v) $\angle EHF$

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



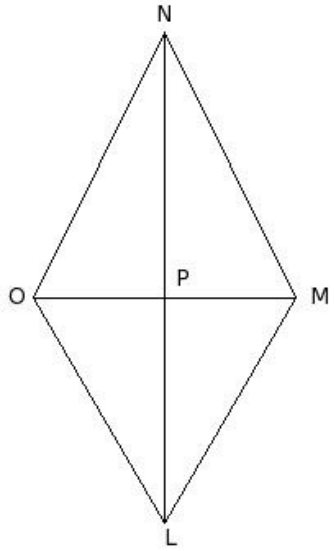
(i) $\angle FGH$ (ii) $\angle HIG$ (iii) $\angle HIF$ (iv) $\angle FIG$ (v) $\angle FJI$

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



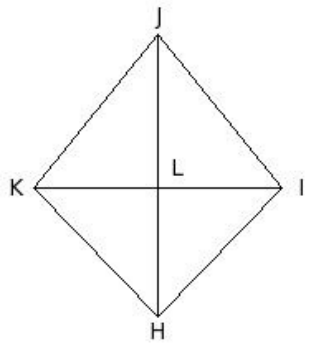
(i) $\triangle NMJ$ (ii) $\triangle MKJ$ (iii) $\triangle LKJ$ (iv) $\triangle NLK$ (v) $\triangle MKL$

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



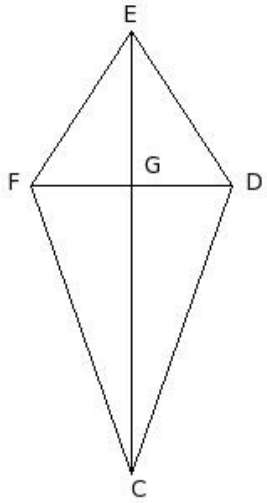
(i) $\triangle NOL$ (ii) $\triangle OML$ (iii) $\triangle PNM$ (iv) $\triangle POL$ (v) $\triangle OMN$

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



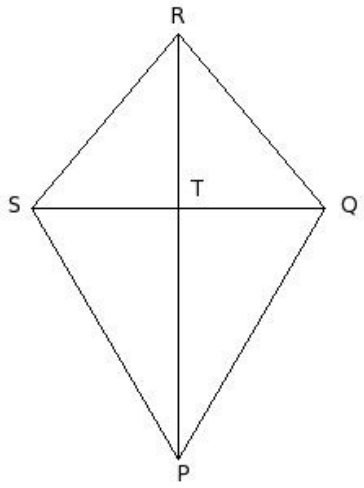
(i) $\triangle KIJ$ (ii) $\triangle LJI$ (iii) $\triangle KIH$ (iv) $\triangle LJK$ (v) $\triangle LIH$

73. In kite CDEF, $\overline{CE}$ and $\overline{DF}$ are diagonals. Then $\triangle GDC \cong$



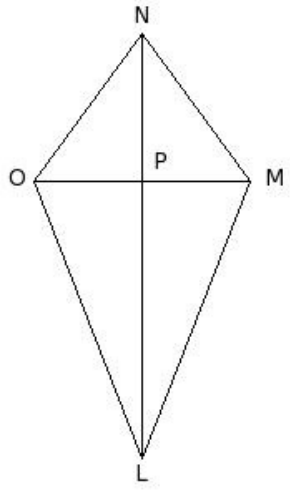
(i) $\triangle GFC$ (ii) $\triangle GEF$ (iii) $\triangle FDC$ (iv) $\triangle GED$ (v) $\triangle FDE$

74. In kite PQRS, $\overline{PR}$ and $\overline{QS}$ are diagonals. Then $\triangle TRS \cong$



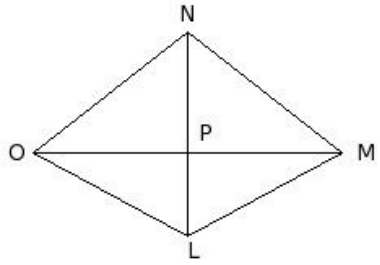
(i) $\triangle TRQ$ (ii) $\triangle TSP$ (iii) $\triangle SQR$ (iv) $\triangle SQP$ (v) $\triangle TQP$

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



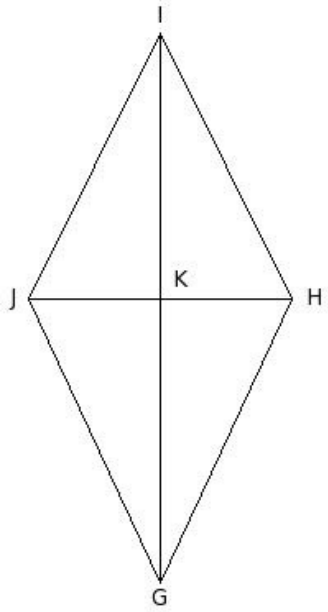
(i) $\triangle POL$ (ii) $\triangle PML$ (iii) $\triangle OML$ (iv) $\triangle PNO$ (v) $\triangle OMN$

76. In kite LMNO, $\overline{LN}$ and $\overline{MO}$ are diagonals. Then $\angle OLP =$



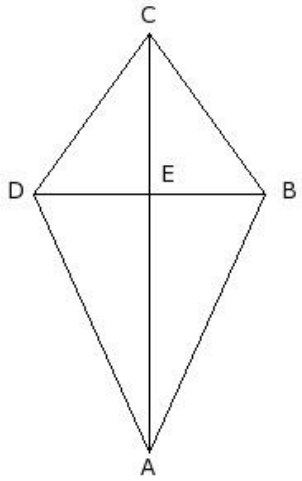
(i) $\angle LPO$ (ii) $\angle MLP$ (iii) $\angle PNM$ (iv) $\angle OPN$ (v) $\angle PNO$

77. In kite GHIJ, $\overline{GI}$ and $\overline{HJ}$ are diagonals. Then $\angle HGK =$



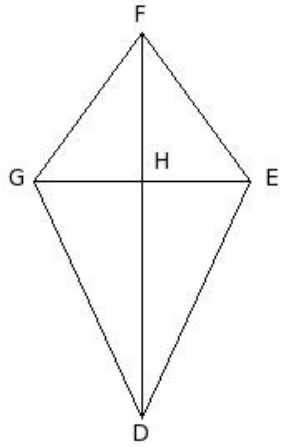
(i) $\angle KIJ$ (ii) $\angle JGK$ (iii) $\angle KIH$ (iv) $\angle GKJ$ (v) $\angle JKI$

78. In kite ABCD, $\overline{AC}$ and $\overline{BD}$ are diagonals. Then $\angle ECD =$



(i) $\angle DEC$ (ii) $\angle DAE$ (iii) $\angle ECB$ (iv) $\angle BAE$ (v) $\angle AED$

79. In kite DEFG, $\overline{DF}$ and $\overline{EG}$ are diagonals. Then $\angle HFE =$



(i) $\angle HFG$ (ii) $\angle GDH$ (iii) $\angle GHF$ (iv) $\angle EDH$ (v) $\angle DHG$

Assignment Key

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