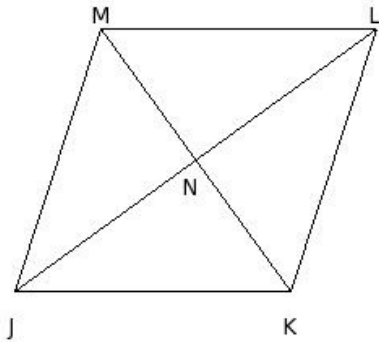


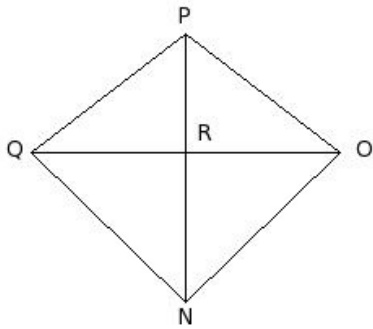


1. In rhombus JKLM, diagonals \overline{JL} and \overline{KM} intersect at N. Then $\angle KLM =$



- (i) $\angle JKN$ (ii) $\angle JKL$ (iii) $\angle MJK$ (iv) $\angle LMJ$

2. In kite NOPQ, \overline{NP} and \overline{OQ} are diagonals. Then $NO =$

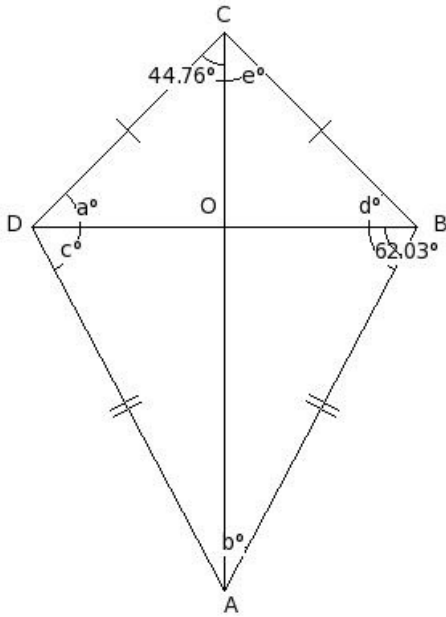


- (i) QN (ii) PQ (iii) OP (iv) NP (v) OQ

In the adjoining figure, ABCD is a kite in which $AB = DA$, $BC = CD$

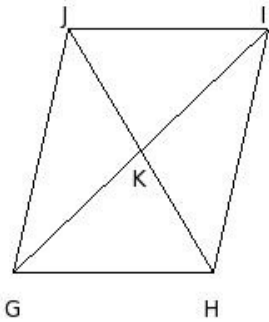
3. and the diagonals \overline{BD} and \overline{AC} intersect at O.

If $\angle OCD = 44.76^\circ$ and $\angle ABO = 62.03^\circ$, find the measure of each of the angles marked a,b,c,d and e.



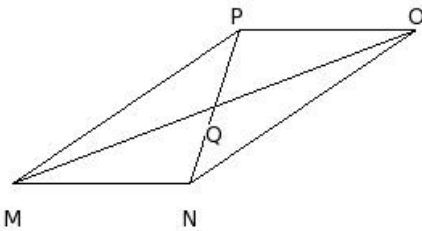
- (i) $a = 45.24^\circ$, $b = 28.97^\circ$, $c = 61.03^\circ$, $d = 47.24^\circ$, $e = 44.76^\circ$
- (ii) $a = 45.24^\circ$, $b = 28.97^\circ$, $c = 61.03^\circ$, $d = 45.24^\circ$, $e = 44.76^\circ$
- (iii) $a = 45.24^\circ$, $b = 28.97^\circ$, $c = 62.03^\circ$, $d = 45.24^\circ$, $e = 44.76^\circ$
- (iv) $a = 45.24^\circ$, $b = 27.97^\circ$, $c = 62.03^\circ$, $d = 45.24^\circ$, $e = 44.76^\circ$
- (v) $a = 45.24^\circ$, $b = 28.97^\circ$, $c = 61.03^\circ$, $d = 47.24^\circ$, $e = 42.76^\circ$

4. In parallelogram GHIJ, diagonals \overline{HJ} and \overline{GI} intersect at K. Then $\triangle IJK \cong$



- (i) $\triangle IJK$ (ii) $\triangle JGH$ (iii) $\triangle GHK$ (iv) $\triangle HIJ$ (v) $\triangle GHI$

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

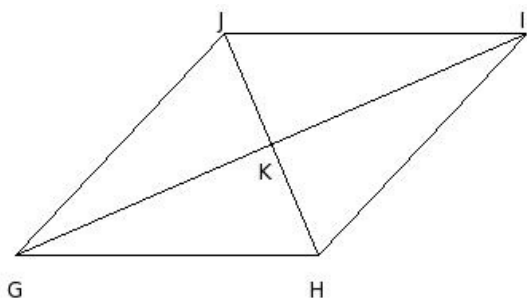


- (i) PM (ii) MQ (iii) OQ (iv) NO (v) NQ

6. Name all quadrilaterals whose diagonals bisect each other

- (i) square, parallelogram (ii) parallelogram, square, rhombus, rectangle (iii) rectangle, rhombus
- (iv) square, rhombus (v) square, rectangle

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

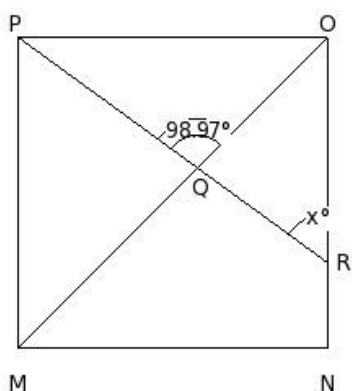


- (i) $\angle GHK$ (ii) $\angle IJK$ (iii) $\angle KHI$ (iv) $\angle JKI$

8. If the two diagonals of a parallelogram are equal and right bisectors of each other, it is a

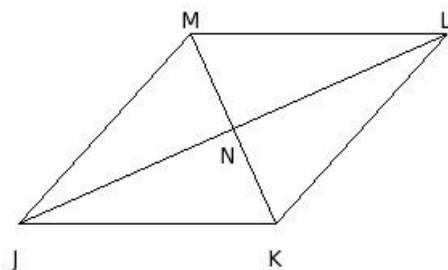
- (i) None of these (ii) trapezium (iii) rhombus (iv) rectangle (v) square

9. In the adjoining figure, $MNOP$ is a square. A line segment PR cuts the side NO at R and the diagonal MO at Q such that $\angle PQO = 98.97^\circ$ and $\angle QRO = x^\circ$. Find the value of x .



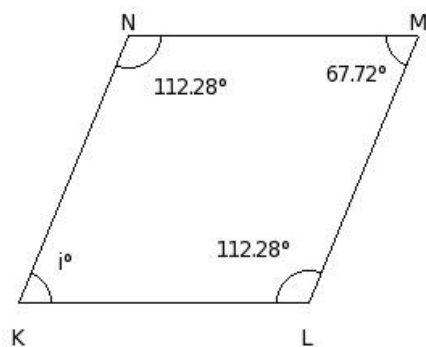
- (i) 53.97° (ii) 55.97° (iii) 51.97° (iv) 52.97° (v) 54.97°

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



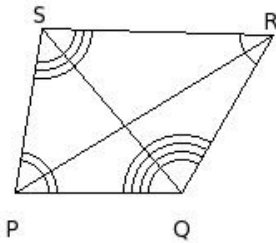
- (i) $\angle MJN$ (ii) $\angle KLN$ (iii) $\angle NJK$ (iv) $\angle JNM$

11. Find the missing angle in the given rhombus



- (i) 97.72° (ii) 72.72° (iii) 77.72° (iv) 82.72° (v) 67.72°

12. The vertices of the quadrilateral are

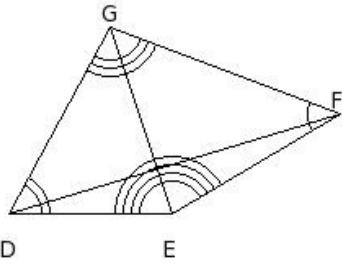


- (i) P, Q, R, T (ii) P, Q, S, U (iii) P, Q, S, T (iv) P, Q, R, U (v) P, Q, R, S

13. Three angles of a quadrilateral are equal and the fourth angle measure 84.79° . What is the measure of each of the equal angles?

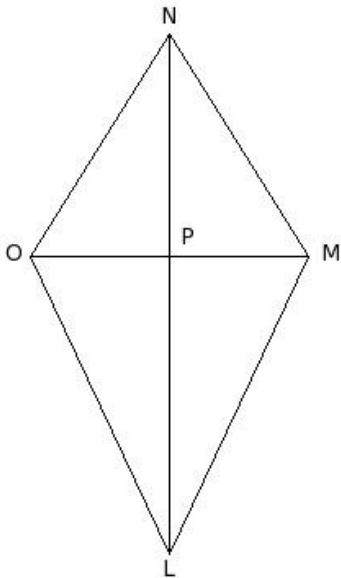
- (i) 92.74° (ii) 89.74° (iii) 90.74° (iv) 93.74° (v) 91.74°

14. The opposite angles of the quadrilateral are



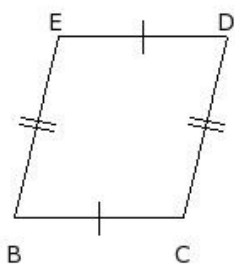
- (i) $\angle D$ & $\angle E$, $\angle F$ & $\angle G$ (ii) $\angle D$ & $\angle G$, $\angle E$ & $\angle H$ (iii) $\angle D$ & $\angle F$, $\angle E$ & $\angle G$ (iv) $\angle D$ & $\angle F$, $\angle E$ & $\angle H$
 (v) $\angle D$ & $\angle G$, $\angle F$ & $\angle E$

15. In kite LMNO, \overline{LN} and \overline{MO} are diagonals. Then NO =



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

16. Identify the figure below



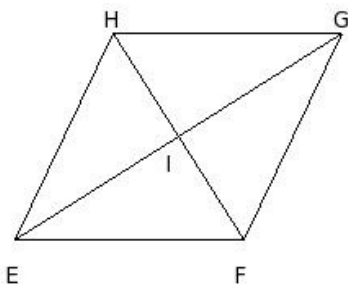
- (i) rhombus (ii) trapezium (iii) rectangle (iv) parallelogram (v) kite

17. Which of the following statements are true?

- a) Every rectangle is a rhombus
- b) Every parallelogram is a rectangle
- c) Every square is a rectangle
- d) Every rectangle is a parallelogram
- e) Every square is a rhombus
- f) Every parallelogram is a trapezium
- g) Every rhombus is a parallelogram

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

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

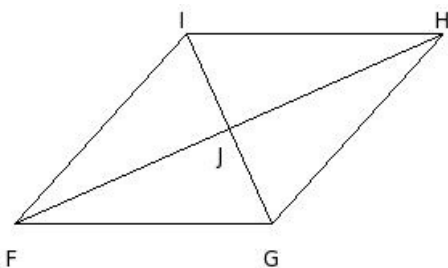


- (i) EI (ii) GI (iii) HE (iv) HI

19. The angles of a quadrilateral PQRS are in the ratio 5 : 4 : 6 : 9. Find the measure of each angle of the quadrilateral.

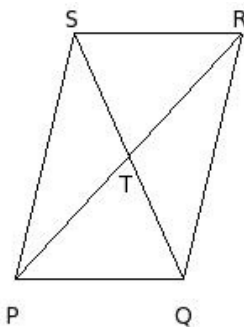
- (i) $P=73^\circ, Q=62^\circ, R=89^\circ, S=136^\circ$ (ii) $P=75^\circ, Q=60^\circ, R=90^\circ, S=135^\circ$ (iii) $P=74^\circ, Q=58^\circ, R=91^\circ, S=137^\circ$
(iv) $P=76^\circ, Q=59^\circ, R=92^\circ, S=133^\circ$ (v) $P=77^\circ, Q=59^\circ, R=88^\circ, S=136^\circ$

20. In rhombus FGHI, diagonals \overline{FH} and \overline{GI} intersect at J. Then $HI \neq$



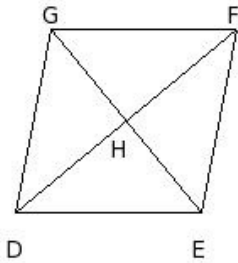
- (i) GH (ii) FG (iii) IF (iv) GI

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



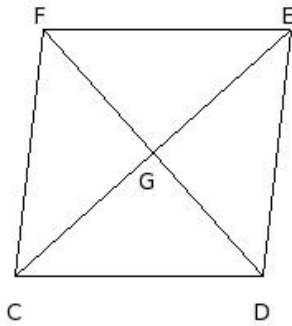
- (i) QR (ii) QT (iii) PT (iv) ST (v) SP

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



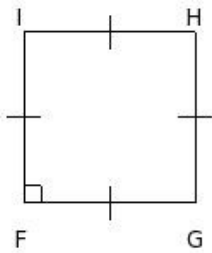
- (i) EG (ii) EF (iii) GD (iv) FG

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



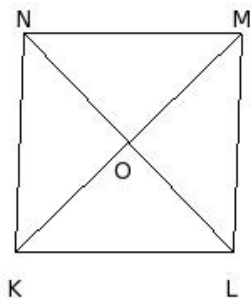
- (i) $\angle FGE$ (ii) $\angle GFC$ (iii) $\angle GDE$ (iv) $\angle EFG$

24. Identify the figure below



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

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



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

Assignment Key

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