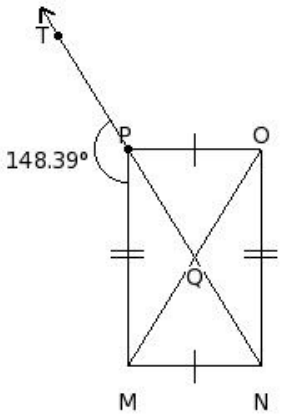
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Quadrilaterals

Grade : SSC Grade VII

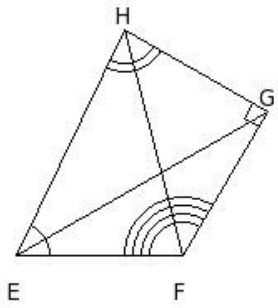
1. In the given figure, $MNOP$ is a rectangle whose diagonals intersect at Q.
Diagonal NP is produced to T and $\angle MPT = 148.39°$. Find the angles of $\triangle QMN$.



(i) $Q=63.22°, M=58.39°, N=58.39°$ (ii) $Q=61.22°, M=58.39°, N=60.39°$ (iii) $Q=63.22°, M=56.39°, N=60.39°$

(iv) $Q=65.22°, M=58.39°, N=56.39°$ (v) $Q=61.22°, M=60.39°, N=58.39°$

2. The vertices of the quadrilateral are



(i) E , F , G , I (ii) E , F , H , J (iii) E , F , H , I (iv) E , F , G , J (v) E , F , G , H

ABCD is a rhombus in which $\angle A = 100°$.

3. $\overline{BD}$

is the diagonal. Then $\triangle ABC$ is

(i) an isosceles triangle (ii) a scalene triangle (iii) an equilateral triangle (iv) None of these

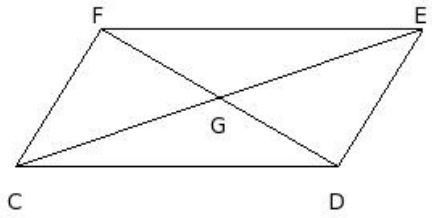
(v) an obtuse angled triangle

4. Which of the following statements are true?

a) Every rectangle is a rhombus
b) Every parallelogram is a rectangle
c) Every rhombus is parallelogram
d) Every rectangle is a parallelogram
e) Every square is a rectangle

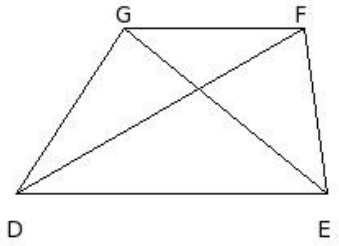
(i) {a,b,e} (ii) {b,d} (iii) {c,d,e} (iv) {a,c,d} (v) {a,c}

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



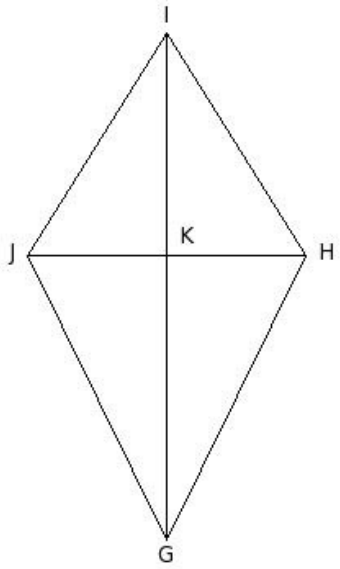
(i) $\triangle FCD$ (ii) $\triangle CDE$ (iii) $\triangle DEF$ (iv) $\triangle CDG$ (v) $\triangle EFG$

6. In trapezium DEFG, $\overline{DF}$ and $\overline{EG}$ are diagonals. Then $\overline{FG} \parallel$



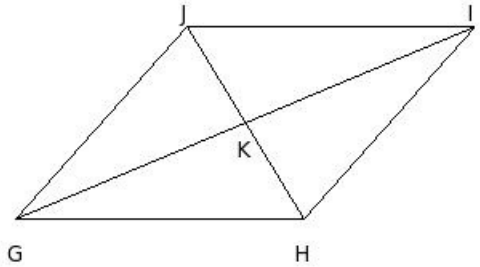
(i) $\overline{DE}$ (ii) $\overline{EF}$ (iii) $\overline{GD}$ (iv) $\overline{EG}$ (v) $\overline{DF}$

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



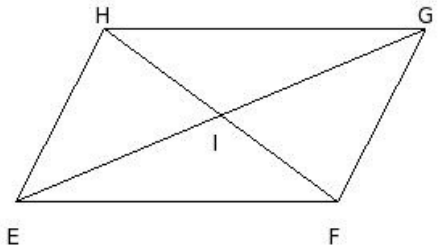
(i) $\angle IJH$ (ii) $\angle GKJ$ (iii) $\angle GHI$ (iv) $\angle IJG$ (v) $\angle GJH$

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



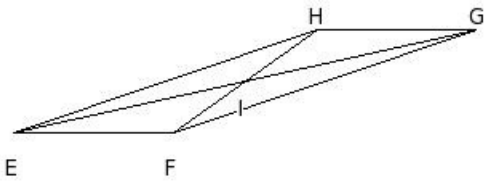
(i) JK (ii) HI (iii) GK (iv) HK (v) JG

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



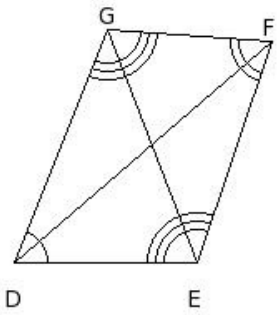
(i) HI (ii) HE (iii) GI (iv) FG (v) FI

10. In parallelogram EFGH, diagonals $\overline{FH}$ and $\overline{EG}$ intersect at I. Then $\overline{EF}$ ∥



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

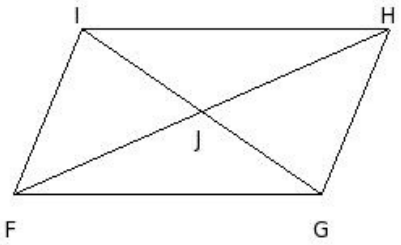
11. The opposite angles of the quadrilateral are



(i) ∠D & ∠E , ∠F & ∠G (ii) ∠D & ∠F , ∠E & ∠H (iii) ∠D & ∠G , ∠E & ∠H (iv) ∠D & ∠G , ∠F & ∠E

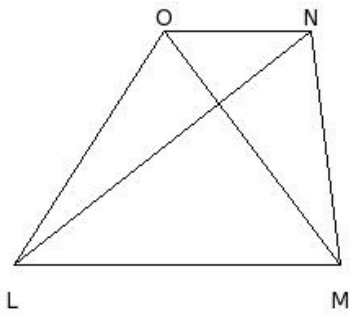
(v) ∠D & ∠F , ∠E & ∠G

12. In parallelogram FGHI, diagonals $\overline{GI}$ and $\overline{FH}$ intersect at J. Then △GHI ≅



(i) △FGH (ii) △HIF (iii) △HIJ (iv) △FGJ (v) △IFG

13. In trapezium LMNO, $\overline{LN}$ and $\overline{MO}$ are diagonals. Then $\overline{LM}$ ∥



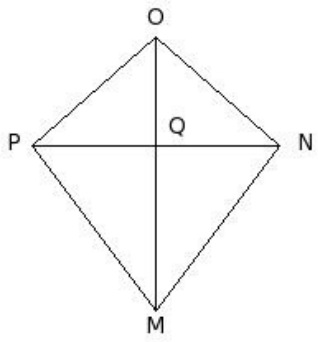
(i) $\overline{MN}$ (ii) $\overline{OL}$ (iii) $\overline{LN}$ (iv) $\overline{MO}$ (v) $\overline{NO}$

14. Name all quadrilaterals whose all angles are equal

(i) square,rhombus (ii) rectangle,rhombus (iii) parallelogram,square,rhombus,rectangle

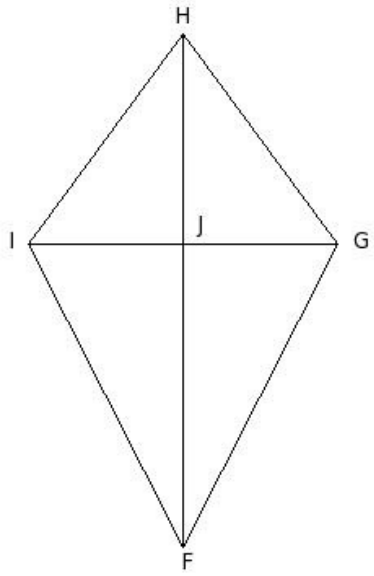
(iv) square,rectangle (v) square,kite

15. In kite MNOP, $\overline{MO}$ and $\overline{NP}$ are diagonals. Then $\triangle QPM \cong$



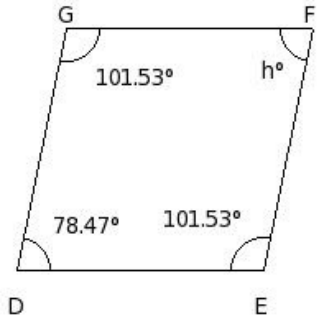
(i) $\triangle QON$ (ii) $\triangle QOP$ (iii) $\triangle QNM$ (iv) $\triangle PNM$ (v) $\triangle PNO$

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



(i) $\angle FJI$ (ii) $\angle IJH$ (iii) $\angle IFJ$ (iv) $\angle JHI$ (v) $\angle JHG$

17. Find the missing angle in the given rhombus



(i) 78.47° (ii) 83.47° (iii) 93.47° (iv) 108.47° (v) 88.47°

18. Name all quadrilaterals whose diagonals are perpendicular and bisect each other

(i) square,parallelogram (ii) square,kite (iii) square,rhombus (iv) rectangle,rhombus

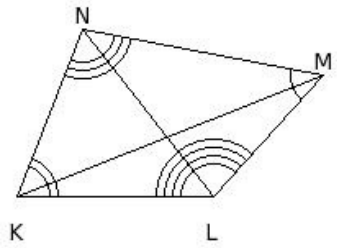
(v) parallelogram,square,rhombus,rectangle

19. Which of the following are true?

a) A parallelogram is a rhombus
b) A square is a trapezium
c) A trapezium is a square
d) A rectangle is a rhombus
e) A square is a rectangle

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

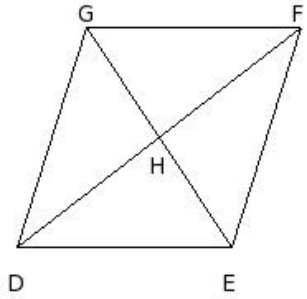
20. The opposite sides of the quadrilateral are



(i) $\overline{KL}$ & $\overline{MN}$, $\overline{LM}$ & $\overline{NK}$ (ii) $\overline{KM}$ & $\overline{NL}$, $\overline{MN}$ & $\overline{LK}$ (iii) $\overline{KL}$ & $\overline{MO}$, $\overline{LM}$ & $\overline{OK}$ (iv) $\overline{KL}$ & $\overline{NO}$, $\overline{LN}$ & $\overline{OK}$

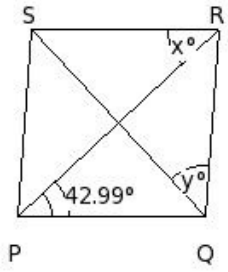
(v) $\overline{KM}$ & $\overline{LN}$, $\overline{ML}$ & $\overline{NK}$

21. In the adjoining figure, DEFG is a parallelogram in which $\angle GDF = 34.97°, \angle FDE = 37.5°, \angle GHF = 85.37°$. Calculate $\angle GEF$



(i) 48.40° (ii) 52.40° (iii) 49.40° (iv) 50.40° (v) 51.40°

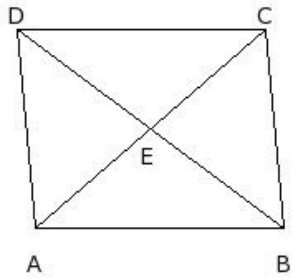
22. In the figure given below, PQRS is a rhombus. Find the values of x and y



(i) x=41.99°,y=46.01° (ii) x=42.99°,y=47.01° (iii) x=44.99°,y=49.01° (iv) x=40.99°,y=45.01°

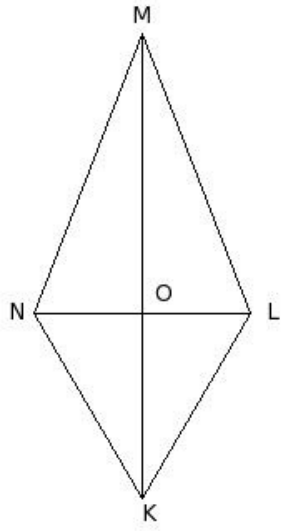
(v) x=43.99°,y=48.01°

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



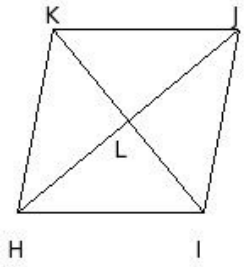
(i) $\triangle CDE$ (ii) $\triangle ABC$ (iii) $\triangle ABE$ (iv) $\triangle CDA$ (v) $\triangle BCD$

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



(i) $\angle KNL$ (ii) $\angle KON$ (iii) $\angle KOL$ (iv) $\angle MNL$ (v) $\angle KLM$

25. In rhombus HIJK, diagonals $\overline{HJ}$ and $\overline{IK}$ intersect at L. Then IL =



(i) JL (ii) KH (iii) KL (iv) HL

Assignment Key

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