EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Quadrilaterals

Grade : ICSE Grade VII

1. Name all quadrilaterals whose opposite angles are equal

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

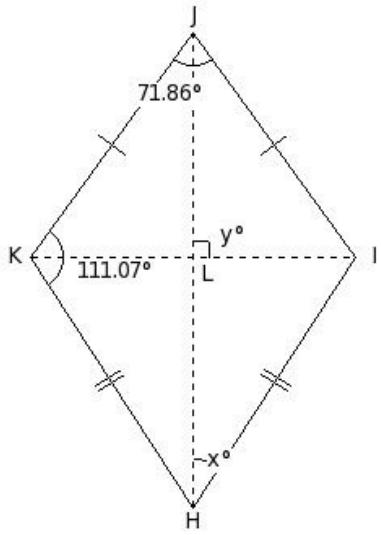
   (iv) square,parallelogram (v) square,rectangle

2. Two adjacent angles of a parallelogram are in the ratio $7:29$.
   Find the measure of each of its angles.

   (i) $A=36°,B=144°,C=37°,D=143°$ (ii) $A=37°,B=144°,C=33°,D=146°$ (iii) $A=33°,B=147°,C=34°,D=146°$

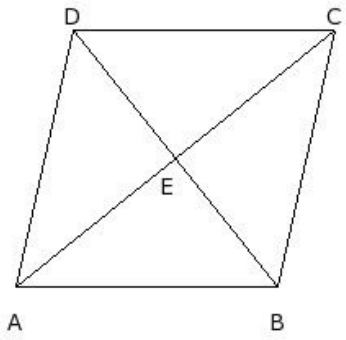
   (iv) $A=34°,B=143°,C=36°,D=147°$ (v) $A=35°,B=145°,C=35°,D=145°$

3. In the given figure, HIJK is a kite whose diagonals intersect at L.
   If $\angle IJK = 71.86°$ and $\angle JKH = 111.07°$, calculate $\angle LHI$ and $\angle JLI$.



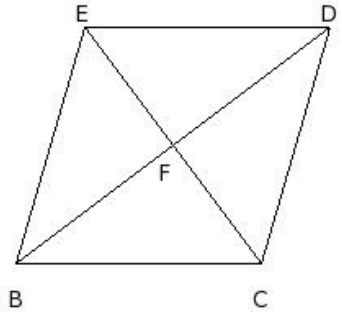
   (i) $x=35°,y=92°$ (ii) $x=31°,y=88°$ (iii) $x=34°,y=91°$ (iv) $x=32°,y=89°$ (v) $x=33°,y=90°$

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



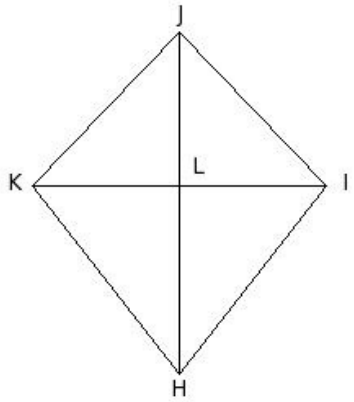
   (i) $\angle BEA$ (ii) $\angle DEC$ (iii) $\angle DAB$ (iv) $\angle AED$

5. In rhombus BCDE, diagonals $\overline{BD}$ and $\overline{CE}$ intersect at F. Then $\angle FEB \neq$



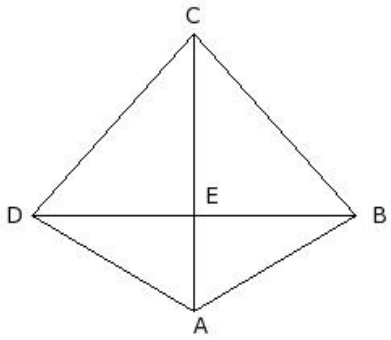
(i) $\angle BCF$ (ii) $\angle FCD$ (iii) $\angle EFD$ (iv) $\angle DEF$

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



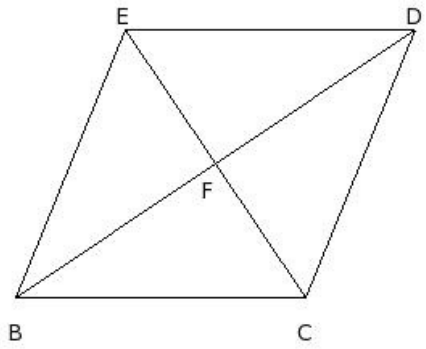
(i) IK (ii) HJ (iii) HI (iv) KH (v) JK

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



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

8. In rhombus BCDE, diagonals $\overline{BD}$ and $\overline{CE}$ intersect at F. Then $\overline{CD} \parallel$



(i) $\overline{BC}$ (ii) $\overline{CE}$ (iii) $\overline{DE}$ (iv) $\overline{EB}$

9. Which of the following properties apply for a trapezium ?

(i) Diagonals are perpendicular to each other (ii) Diagonals are equal

(iii) One pair of opposite sides are parallel (iv) Both adjacent angles are obtuse

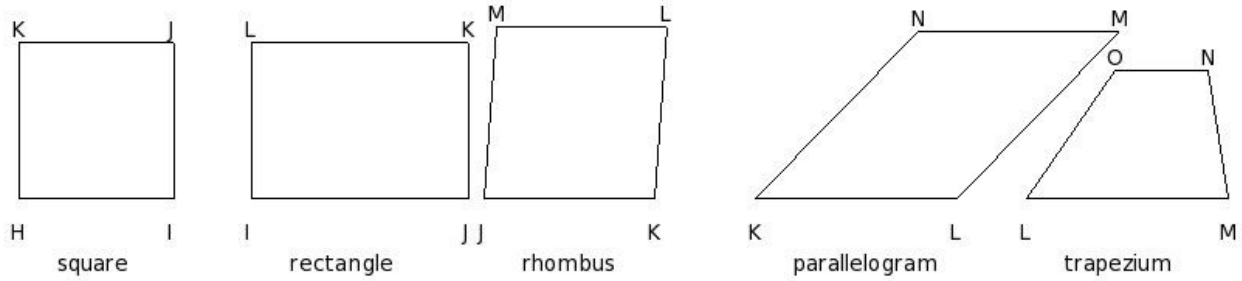
(v) Adjacent angles are supplementary

10. Which of the following statements are true?

a) All trapeziums are parallelograms
b) All quadrilaterals are parallelograms
c) The set of parallelograms is a subset of the set of trapeziums
d) A parallelogram is a trapezium
e) All quadrilaterals are trapeziums

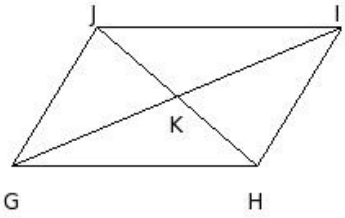
(i) {a,c} (ii) {b,d,c} (iii) {b,d} (iv) {e,a,c} (v) {c,d}

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



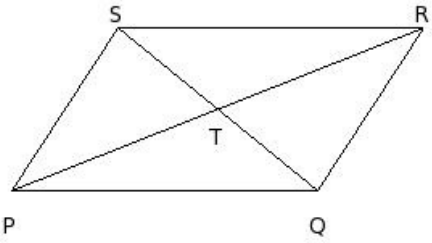
(i) square (ii) rhombus (iii) trapezium (iv) rectangle (v) parallelogram

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



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

13. In parallelogram PQRS, diagonals $\overline{QS}$ and $\overline{PR}$ intersect at T. Then $\overline{RS}$ ∥



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

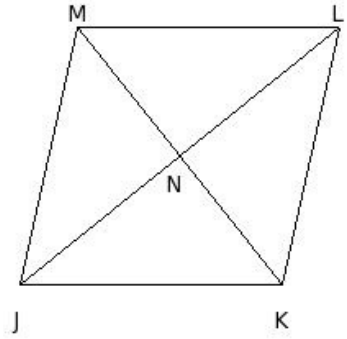
14. One angle of a parallelogram measures D = 73.62°.
Find the measure of each of its remaining angles.

(i) E=106.38°,F=73.62°,G=106.38° (ii) E=104.38°,F=71.62°,G=104.38°

(iii) E=108.38°,F=75.62°,G=108.38° (iv) E=105.38°,F=72.62°,G=105.38°

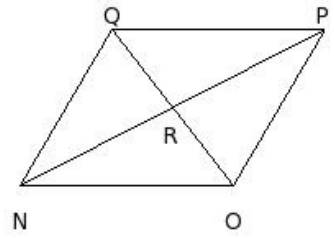
(v) E=107.38°,F=74.62°,G=107.38°

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



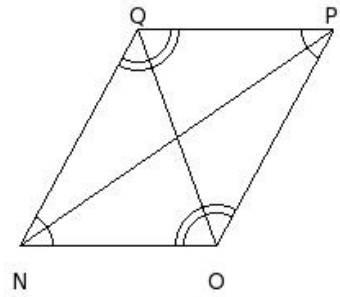
(i) $\overline{KM}$ (ii) $\overline{JK}$ (iii) $\overline{MJ}$ (iv) $\overline{KL}$

16. In the adjoining figure, NOPQ is a parallelogram in which $\angle QNP = 32.67°, \angle PNO = 26.81°, \angle QRP = 100.33°$. Calculate $\angle NOQ$



(i) 51.86° (ii) 54.86° (iii) 52.86° (iv) 53.86° (v) 50.86°

17. The name of the parallelogram is



(i) NOQR (ii) NPQO (iii) NOPR (iv) NOPQ (v) NPOQ

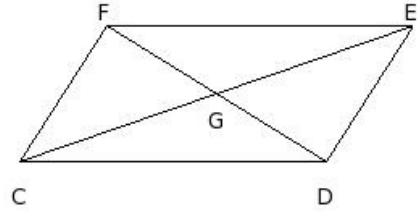
18. The sum of the interior angles of a quadrilateral is

(i) 270° (ii) 180° (iii) 360° (iv) 90°

19. If one of the angles of a rhombus is a right angle, it is a

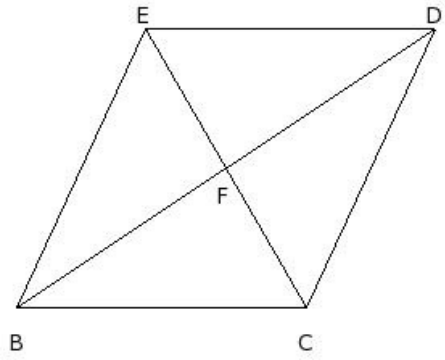
(i) rectangle (ii) square (iii) parallelogram (iv) None of these (v) trapezium

20. In the adjoining figure, CDEF is a parallelogram in which $\angle FCE = 38.27°, \angle ECD = 19°, \angle FGE = 129.3°$. Calculate $\angle DEC$



(i) 40.27° (ii) 36.27° (iii) 38.27° (iv) 37.27° (v) 39.27°

21. In parallelogram BCDE, diagonals $\overline{CE}$ and $\overline{BD}$ intersect at F. Then ∠EBC =



(i) ∠DEF (ii) ∠CDE (iii) ∠BCD (iv) ∠BCF (v) ∠DEB

22. Which of the following statements are true?

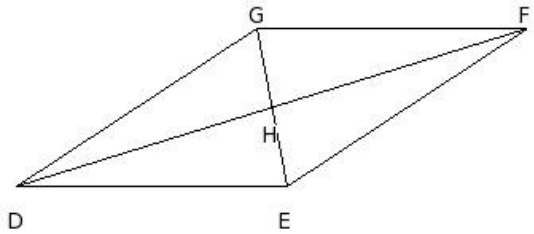
a) Every parallelogram is a rectangle
b) Every rectangle is a parallelogram
c) Every square is a rectangle
d) Every rhombus is parallelogram
e) Every rectangle is a rhombus

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

23. In parallelogram ABCD, if ∠D = 111.17°, then find the value of ∠B

(i) 109.17° (ii) 113.17° (iii) 111.17° (iv) 110.17° (v) 112.17°

24. In parallelogram DEFG, diagonals $\overline{EG}$ and $\overline{DF}$ intersect at H. Then GH =



(i) EF (ii) EH (iii) DH (iv) GD (v) FH

25. Which of the following properties apply for a rectangle ?

a) Opposite sides are parallel
b) Diagonals are equal
c) Adjacent angles are equal
d) Opposite sides are equal
e) Diagonals bisect each other
f) Opposite angles are equal
g) Adjacent sides are equal

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

Assignment Key

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