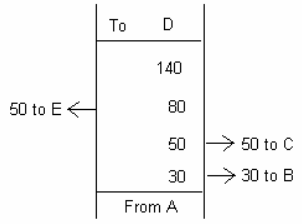
IX Class

EXERCISE - 3 & 4

I. ONE mark questions :

1. The angles in a quadrilateral are x^0, $(x + 10)^0$, $(x + 20)^0$ and $(2x – 30)^0$. Find them.
2. The diagonals of rhombus are 6 cm, 8 cm. Find its area.
3. In a parallelogram one side is 5 cm and corresponding height is 2.5 cm. Find area.
4. If the parallel sides of a trapezium are 8 cm and 5 cm and the distance between them is 2.5cm, then find the area of that trapezium.
5. The diagonal of a quadrilateral is 10 cm, the length of the perpendicular drawn from the remaining two vertices on it are 3 cm and 2 cm. Find the area of the quadrilateral.
6. The area of parallelogram ABCD is 25 cm^2. AC is the diagonal. Find the area of Δ ABC.
7. Draw the diagram for the following field data.



8. The angles of a quadrilateral are in 1 : 2 : 3 : 4
   Find the greatest angle.

II. Choose the correct answer :

9. The area of a rhombus is 26 cm and one of its diagonal is 13 cm. The second diagonal is [ ]

   a) 4 cm b) 6.5 cm c) 20 cm d) None

10. The area of quadrilateral is [ ]

    a) bh b) $\frac{1}{2}(h_1 + h_2)d$ c) $\frac{1}{2}(a+b)d$ d) None

11. The area of a parallelogram whose one side is 7.5 cm and height is 3 cm is [ ]

    a) 20.5 cm^2 b) 22.5 cm^2 c) 15.6 cm^2 d) None

12. The diagonal of a parallelogram divides it into two [ ]

    a) congruent parallelograms b) congruent squares

    c) congruent triangles d) None

13. The area of trapezium is 32 cm^2 and its parallel sides are 9 cm, 5 cm then the distance between parallel sides is [ ]

    a) l3.5 cm b) 5.6 cm c) 8.2 cm d) 4.5 cm

III. Fill in the blanks :

14. The diagonals of a rhombus are x cm and 2x cm then its area is _____ .

15. The diagonals of a rhombus are 8 cm, 6 cm then its side is _____ .

16. The diagonals of a rhombus ABCD are 10 cm and 5 cm and they intersect at O then area of the triangle AOB = _____ .

17. ABCD is a parallelogram and AC is the diagonal then Ar(Δ ABC): Ar($||$gm ABCD) = __

18. In a parallelogram ABCD, if $\angle A = 72^0$ then $\angle B$ = _____ .

IV. Match the following :

	Group – A		**Group – B**
19.	Rhombus	[ ]	A) $\frac{1}{2}(h_1 + h_2)d$
20.	Parallelogram	[ ]	B) $2(l + b)$
21.	Quadrilateral	[ ]	C) $\frac{1}{2}(a+b)h$
22.	Trapezium	[ ]	D) bh
23.	Square	[ ]	E) $4a^2$
			F) $\frac{1}{2}\ d_1 d_2$
			G) a^2