INDIAN SCHOOL NIZWA - WORKSHEET

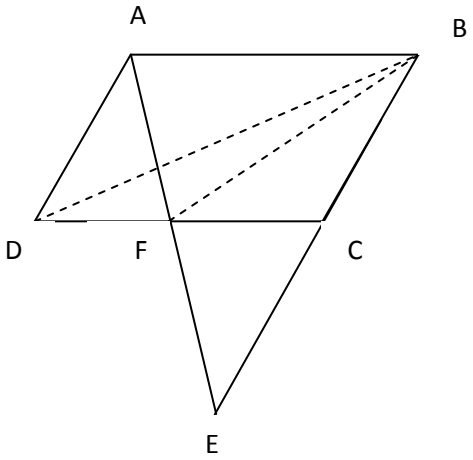
MATHEMATICS

Ch:8 Quadrilaterals

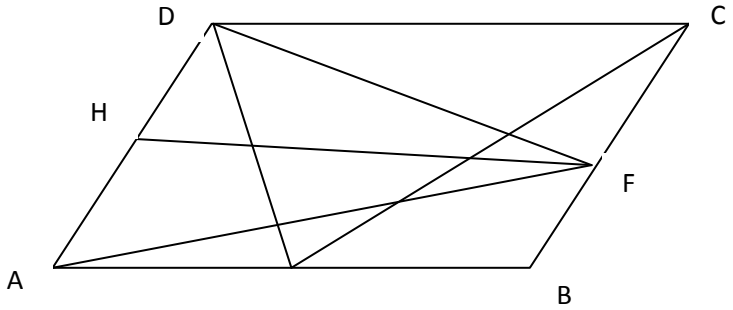
Ch:9 Area of a Parallelograms and Triangles

Name: _____ Date:_____ Class: IX Sec: ___

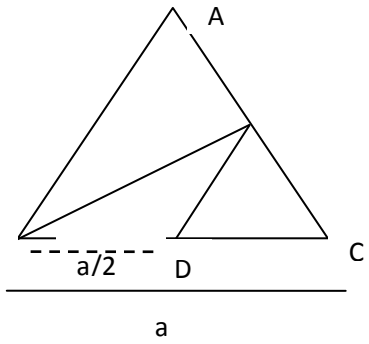
1. ABCD is a parallelogram in which BC is produced to E such that CE=BC. AE intersects CD at F. If area of $\Delta BDF=3\ cm^2$, find the area of parallelogram ABCD.



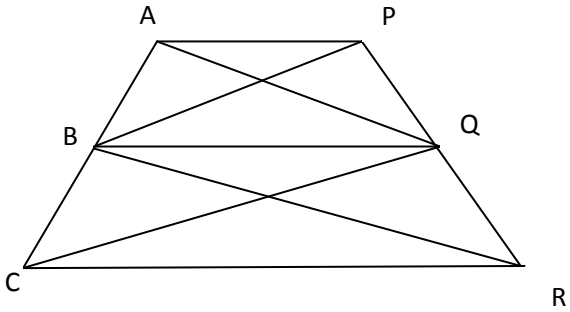
2. In a parallelogram, ABCD, E , F are any two points on the sides AB and BC respectively. Show that ar(ΔADF)=ar(ΔDCE).



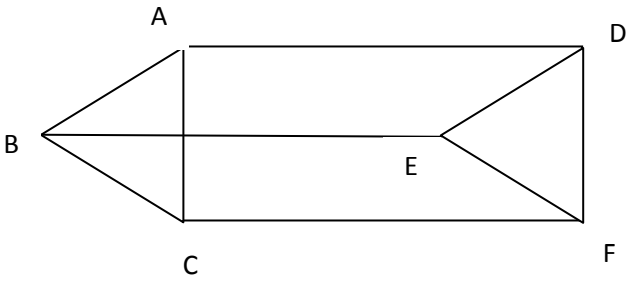
3. ABC and BDE are two equilateral triangles such that D is the mid-point of BC. Then prove that ar(ΔBDE)=$\frac{1}{4}ar(\Delta ABC)$.



4. In the given figure AP ‖ BQ ‖ CR. Prove that ar(ΔAQC) = ar (ΔPBR)



5. AB ‖ DE, AB=DE, AC ‖ DF and AC=DF. Prove that BC ‖ EF and BC=EF.



6. If the angles of a quadrilateral are $(x-15)^0, x^0, (x+20)^0 and\ (2x+5)^0$, then find the greatest angle of the parallelogram.

7. Two parallel lines l and m are intersected by a transversal p. Show that the quadrilateral formed by the bisectors of interior angles is a rectangle.

8. If the medians of a ΔABC intersect at G. Show that ar(ΔAGC)=ar(ΔAGB)=ar(ΔBGC)=$\frac{1}{3}ar(\Delta ABC)$.

9. In ΔABC, if L and M are the points on AB and AC, respectively such that LM ‖ BC. Prove that ar(ΔLOB)=ar(ΔMOC).

