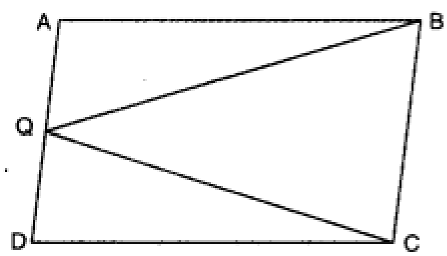
Question 1.
Two parallelograms are on equal bases and between the same parallels. Find the ratio of their areas.

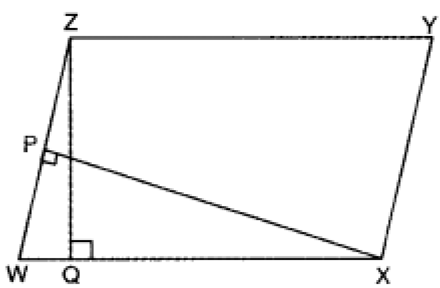
Question 2.
In ΔXYZ, XA is a median on side YZ. Find ratio of ar(ΔXYA) : ar(ΔXZA).

Question 3.
ABCD is a trapezium with parallel sides AB = a cm and DC = b cm (fig.). E and F are the mid-points of the non parallel sides. Find the ratio of ar(ABFE) and ar(EFCD).

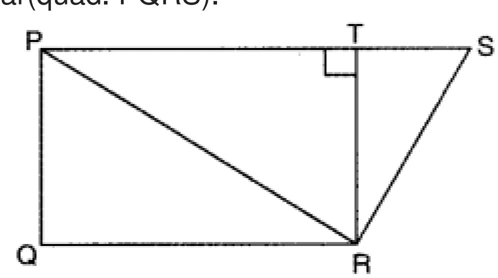
Question 4.
ABCD is a parallelogram and Q is any point on side AD. If ar(ΔQBC) = 10 cm^2, find ar(ΔQAB) + ar(ΔQDC).



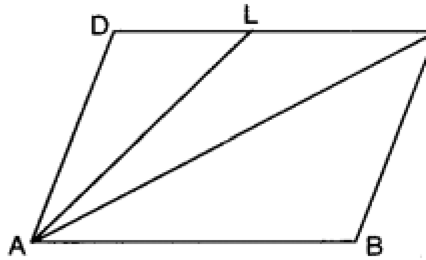
Question 5.
WXYZ is a parallelogram with XP $\perp$ WZ and ZQ $\perp$ WX. If WX = 8 cm, XP = 8 cm and ZQ = 2 cm, find YX.



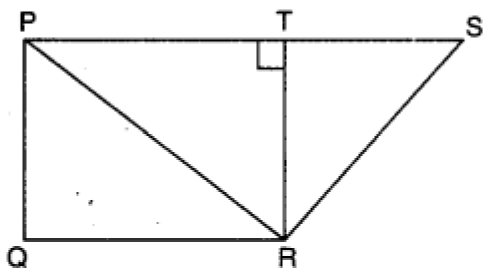
Question 6.
In figure, TR $\perp$ PS, PQ || TR and PS || QR. If QR = 8 cm, PQ = 3 cm and SP = 12 cm, find ar(quad. PQRS).



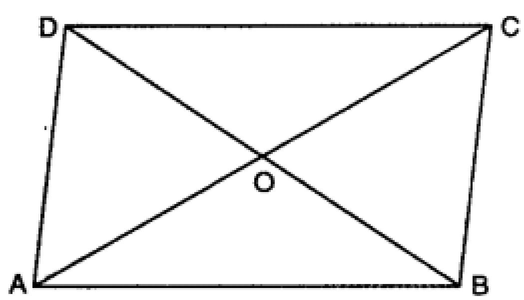
Question 7.
In the given figure, ABCD is a parallelogram and L is the mid-point of DC. If ar(quad. ABCL) is 72 cm, then find ar(ΔADC).



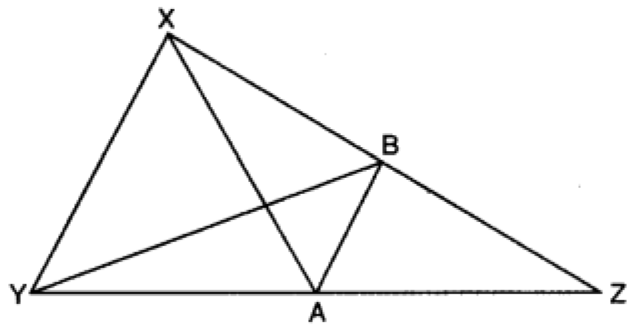
Question 8.
In figure, TR ⊥ PS, PQ || TR and PS || QR. If QR = 8 cm, PQ = 3 cm and SP = 12 cm, find ar (PQRS).



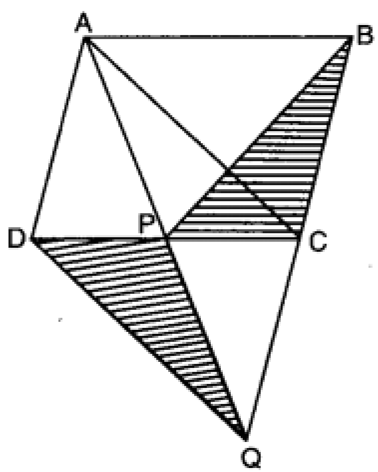
Question 9.
ABCD is a parallelogram and O is the point of intersection of its diagonals. If ar(A AOD) = 4 cm\(^{2}\) find area of parallelogram ABCD.



Question 10.
In the given figure of ΔXYZ, XA is a median and AB || YX. Show that YB is also a median.



Question 11.
ABCD is a parallelogram and BC is produced to a point Q such that AD = CQ (fig.). If AQ intersects DC at P, show that ar(ΔBPC) = ar(ΔDPQ).



Question 12.
In the figure, PQRS is a parallelogram with PQ = 8 cm and ar(ΔPXQ) = 32 cm^2. Find the altitude of gm PQRS and hence its area.