MCQ WORKSHEET-I

CLASS IX: CHAPTER – 9

AREAS OF ||^{gms} AND TRIANGLES

1. *Parallelograms on the same base and between the same parallels are _____ in area.*

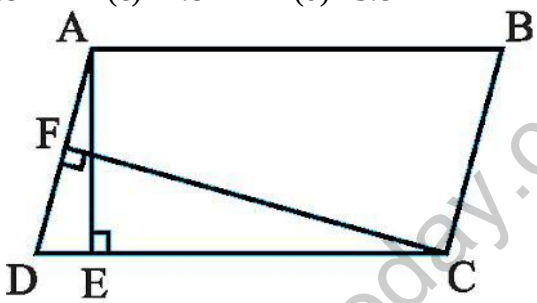
(a) half (b) one third (c) one fourth (d) equal

2. If a triangle and a parallelogram are on the same base and between the same parallels, then prove that the area of the triangle is _____ of the area of the parallelogram.

(a) half (b) one third (c) one fourth (d) equal

3. In the below Fig., ABCD is a parallelogram, AE ⊥ DC and CF ⊥ AD. If AB = 16 cm, AE = 8 cm and CF = 10 cm, find AD.

(a) 10.8 (b) 11.8 (c) 12.8 (d) 13.8



4. In the above Fig., ABCD is a parallelogram, AE ⊥ DC and CF ⊥ AD. If AD = 9 cm, CF = 4 cm and DC = 12 cm, find AE.

(a) 3 cm (b) 6 cm (c) 9 cm (d) 2 cm

5. In the above Fig., ABCD is a parallelogram, AE ⊥ DC and CF ⊥ AD. If AD = 5 cm, CF = 8 cm and AE = 4 cm, find AB.

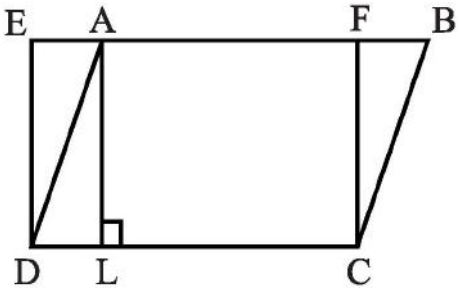
(a) 10 cm (b) 20 cm (c) 9 cm (d) 12 cm

6. If E,F,G and H are respectively the mid-points of the sides of a parallelogram ABCD, then ar (EFGH) =

(a) ar(ABCD) (b) $\frac{1}{2}$ar(ABCD) (c) $\frac{1}{3}$ar(ABCD) (d) $\frac{1}{4}$ar(ABCD)

7. In the below Fig., ABCD is a parallelogram and EFCD is a rectangle, then ar (EFGH) =

(a) ar(ABCD) (b) $\frac{1}{2}$ar(ABCD) (c) $\frac{1}{3}$ar(ABCD) (d) $\frac{1}{4}$ar(ABCD)



8. *Two triangles on the same base (or equal bases) and between the same parallels are _____ in area.*

(a) half (b) one third (c) one fourth (d) equal

9. A median of a triangle divides it into two triangles of _____ areas.
(a) half (b) one third (c) one fourth (d) equal

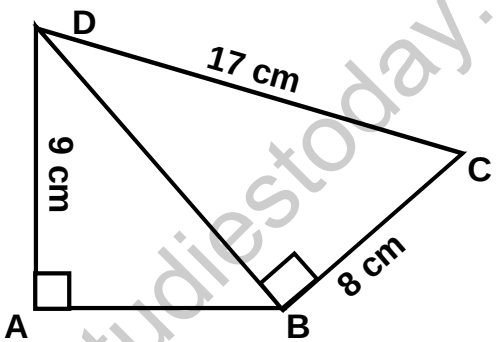
10. Area of a triangle is _____ the product of its base and the corresponding altitude.
(a) half (b) one third (c) one fourth (d) equal

11. Area of a parallelogram is _____ the product of its base and the corresponding altitude.
(a) half (b) one third (c) one fourth (d) equal

12. The area of a rhombus, the lengths of whose diagonals are 16 cm and 24 cm respectively, is
(a) 192 cm^2 (b) 120 cm^2 (c) 384 cm^2 (d) none of these

13. The area of a trapezium whose parallel sides are 9 cm and 6 cm and the distance between these sides is 8 cm is
(a) 92 cm^2 (b) 120 cm^2 (c) 60 cm^2 (d) none of these

14. The area of a below quadrilateral is
(a) 112 cm^2 (b) 120 cm^2 (c) 114 cm^2 (d) none of these



15. The area of a below quadrilateral is
(a) 150 cm^2 (b) 180 cm^2 (c) 100 cm^2 (d) none of these