BCM SCHOOL ,BASANT AVENUE ,DUGRI ROAD ,LUDHIANA

CLASS : IX

SUBJECT – MATHEMATICS

CHAPTER - QUADRILATERAL

ASSIGNMENT- 2

Q1 If angles A, B, C and D of the quadrilateral ABCD, taken in order, are in the ratio 3:7:6:4, then ABCD is a

(a) Kite (b) Rhombus (c) Parallelogram (d) Trapezium

Q 2 Which of the following is not true for a parallelogram**?**

(a) Opposite sides are equal

(b) Opposite angles are equal

(c) Opposite angles are bisected by the diagonals

(d) Diagonals bisect each other

Q3 The figure obtained by joining the mid-points of the sides of a rhombus, taken in order, is

(a) a rhombus (b) a rectangle (c) a square (d) any parallelogram

Q4 Assertion : A diagonal of parallogram divide it into two congruent triangle

Reason : In a parallelogram opposite angle are not equal

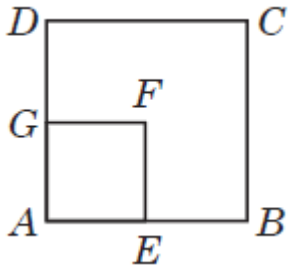
a) both Assertion and reason are correct and reason is correct explanation for Assertion.

b) both Assertion and reason are correct but reason is not correct explanation for Assertion.

c) Assertion is correct but reason is false.

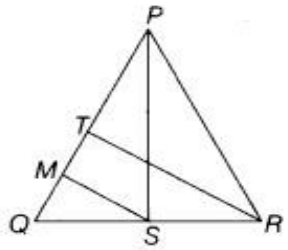
d) both Assertion and reason are false.

Q5 ABCD and AEFG are two parallelograms. If**∠C = 63º then determine ∠G**



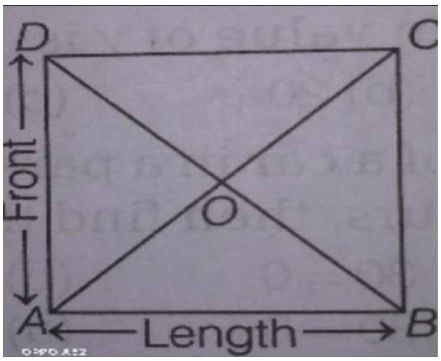
Q6 In a parallelogram show that the angle bisectors of two adjacent angles intersect at right angles.

Q7 In the figure, PS,and RT are medians of △ PQR and SM || RT.



Prove that Q M = $\frac{1}{4}$ PQ

Q7 Pawan is studying in 9th standard. His father purchased a plot which is in a square shape as shown in figure. After visiting the land few questions came in his mind. Give answers to his questions by looking at the figure.



(i) If OA=3cm then value of OC is

(ii) If the side of the plot is 65m How much wire will be needed to fence the plot

(iii) Prove th at **ΔDAB ≅ ΔCBA**