

BCM SCHOOL ,BASANT AVENUE ,DUGRI ROAD ,LUDHIANA

CLASS : IX

SUBJECT – MATHEMATICS

CHAPTER - QUADRILATERAL

ANSWER KEY OF ASSIGNMENT- 2

Sol 1. (d) Trapezium

Sol 2. (c) Opposite angles are bisected by the diagonals

Sol 3. (b) a rectangle

Sol 4. c) Assertion is correct but reason is false.

Sol 5. $\angle C = \angle A = 63^\circ$ (opposite angles of parallelogram are equal)

$\angle A + \angle G = 180^\circ$ (Adjacent angles are supplementary)

$$\angle G = 117^\circ$$

Sol 6. Let ABCD be a parallelogram.

Consider two adjacent angles $\angle A$ and $\angle B$

$\angle A + \angle B = 180^\circ$ [Adjacent angles of parallelogram are supplementary]

$\frac{\angle A}{2} + \frac{\angle B}{2} = 90^\circ$ [Angular bisectors of $\angle A$ and $\angle B$]

$\frac{\angle A}{2} + \frac{\angle B}{2} + \angle C = 180^\circ$

So, $\angle C = 90^\circ$

Sol 7. $QM = MT = \frac{1}{2} QT$ (converse of midpoint theorem)

and $QT = \frac{1}{2} PQ$

So, $QM = \frac{1}{2} \times \frac{1}{2} PQ$

$$QM = \frac{1}{4} PQ$$

Sol 8. (i) 3 cm

(ii) 260 m

(iii) Prove by SAS rule or SSS rule

