



STANDARD 8TH: CHAPTER 7

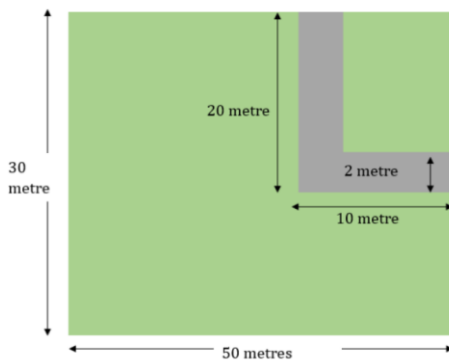
Quadrilateral construction & types

Q.1 Choose the correct alternative.

- Which of the following is NOT a property of a parallelogram?
 - Opposite sides are equal in length
 - Opposite angles are equal in measure
 - Diagonals bisect each other
 - All angles are right angles

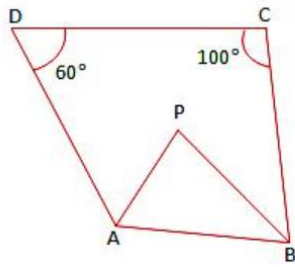
- Which of the following is NOT a type of quadrilateral?
 - Pentagon
 - Trapezoid
 - Rhombus
 - Kite

- A pathway having uniform width of 2 metres was made in a rectangular field. What is the area of the field excluding the path if the dimensions of the field are 30 metres and 50 metres?



- 1100 sq.m
- 1300 sq.m.
- 1444 sq. m.
- 1243 sq.m.

4. In the adjacent figure, the bisectors of $\angle A$ and $\angle B$ meet in a point P. If $\angle C = 100^\circ$ and $\angle D = 60^\circ$, find the measure of $\angle APB$.

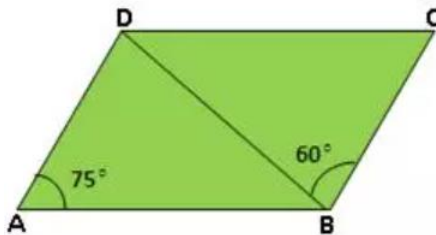


- a) 120°
b) 90°
c) 80°
d) 70°
5. If the length of one of the diagonals of a square is p units, then what is the perimeter of the square?
a) $\sqrt{2}p$
b) $2\sqrt{2}p$
c) $4p$
d) $2p$
6. If the lengths of two diagonals of a rhombus are 6 and 8 units, then what is the perimeter of the rhombus?
a) 10
b) 15
c) 20
d) 25
7. Logan has plans to raise a flower bed diagonally in his garden which is kite-shaped. He measured and got the longest diagonal as 16 yards. The area of his garden is 64 square yards. How long will the other diagonal of the flower bed be?
a) 4
b) 8
c) 12
d) 16

8. Find the area of the rhombus having each side equal to 17 cm and one of its diagonals equal to 16 cm.

- a) 240 sq. cm
- b) 320 sq.cm
- c) 245 sq.cm
- d) 290 sq.cm

9. In the adjoining figure, ABCD is a parallelogram in which $\angle BAD = 75^\circ$ and $\angle DBC = 60^\circ$. Calculate (i) $\angle CDB$ and (ii) $\angle ADB$.



- a) 50° and 60°
- b) 30° and 70°
- c) 40° and 65°
- d) 45° and 60°

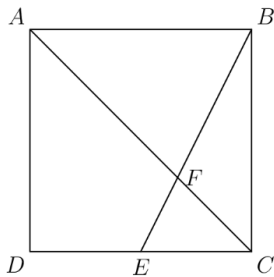
10. The area of a trapezium is 352 cm^2 and the distance between its parallel sides is 16 cm. If one of the parallel sides is of length 25 cm, find the length of the other.

- a) 18
- b) 20
- c) 19
- d) 17

Q.2. Solve the following

1. The length of the two parallel sides of a trapezium is given in the ratio 3:2 and the distance between them is 8 cm. If the area of the trapezium is 400 cm^2 , find the length of the parallel sides.

2. If the diagonals of a rhombus are 12 cm and 7.5 cm, what is the area of the rhombus?
3. Construct a quadrilateral LMNO in which LN = LO = 6 cm, MN = 7.5 cm, MO = 10 cm and NO = 5 cm. Measure the remaining side.
4. Find all angles of parallelogram if one of the angles is 80°
5. In a rectangle, one diagonal is inclined to one of its sides at 25° . Measure the acute angle between the two diagonals.
6. Rhombus RHOM has perimeter 64; $m\angle R=60^\circ$. What is the length of HM?
7. Construct a parallelogram, one of whose sides is 4.4 cm and whose diagonals are 5.6 cm and 7 cm. Measure the other side.
8. What is isosceles trapezium?
9. Point E is the midpoint of side \overline{CD} in square $ABCD$, and \overline{BE} meets diagonal \overline{AC} at F . The area of quadrilateral $AFED$ is 45. What is the area of $ABCD$?



10. Define square and write all its properties.