

MATHS

BOOKS - RS AGGARWAL MATHS (HINGLISH)

QUADRILATERALS

Example

1. Three angles of a quadrilateral are

 54° , 80° and 116° . Find the measure of the

fourth angle.

A. 120°

B. 105°

C. 100°

D. 110°

Answer: D



2. The four angles of a quadrilateral are in the ratio 2:3:5:8. Find the angles.

A. 40° , 60° , 120° and 140° .

B. 80° , 60° , 80° and 160° .

 $C.40^{\circ}, 60^{\circ}, 100^{\circ} \text{ and } 160^{\circ}.$

D. 40° , 70° , 100° and 160° .

Answer: C



3. The measures of two angles of a quadrilateral are 115° and 45° , and the other two angles are equal. Find the measure of each of the equal angles.

- A. 120°
- B. 105°
- C. 100°
- D. 130°

Answer: C



Exercise 15 Fill In The Blanks

1. A quadrilateral has sides.

A. 3

B. 4

 $\mathsf{C.}\,5$

D. 6

Answer: B



2. A quadrilateral has angles.



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3. A quadrilateral has vertices, no three of which are



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4. A quadrilateral has diagonals.

- A. 1
- B. 2
- C. 3
- D. 4

Answer: B



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5. A diagonal of a quadrilateral is a line segment that joins two vertices of the quadrilateral.

B. Adjacent C. Cannot be determined D. None of the above **Answer: A Watch Video Solution** 6. The sum of the angles of a quadrilateral is

A. Opposite

A. 260°

B. 360°

C. 460°

D. 160°

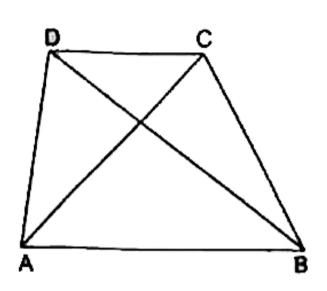
Answer: B



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Exercise 15

1. In the adjoining figure, ABCD is a quadrilateral.



- (i) How many pairs of adjacent sides are there?

 Name them.
- (ii) How many pairs of opposite sides are there? Name them.
- (iii) How many pairs of adjacent angles are

there? Name them.

(iv) How many pairs of opposite angles are there? Name them.

(v) How many diagonals are there? Name them.



2. Prove that the sum of the angles of a quadrilateral is 360° .



3. The three angles of a quadrilateral are $76^{\circ}, 54^{\circ}$ and $108^{\circ}.$ Find the measure of the fourth angle.

- A. 85°
- B. 90°
- C. 122°
- D. 154°

Answer: C



4. The angles of a quadrilateral are in the ratio

3:5:7:9. Find the measure of each of these angles.

A.
$$45^{\circ}$$
 , 75° , 105° , 165°

B.
$$35^\circ$$
 , 75° , 105° , 135°

C.
$$45^\circ$$
 , 75° , 105° , 135°

D.
$$45^\circ, 85^\circ, 105^\circ, 135^\circ$$

Answer: C



5. A quadrilateral has three acute angles, each measuring 75° . Find the measure of the fourth angle.

- A. 90°
- B. 75°
- C. 125°
- D. 135°

Answer: D



6. Three angles of a quadrilateral are equal and the measure of the fourth angle is 120° . Find the measure of each of the equal angles.

- A. 80°
- B. 65°
- C. 70°
- D. 90°

Answer: A



7. Two angles of a quadrilateral measure 85° and 75° respectively. The other two angles are equal. Find the measure of each of these equal angles.

A. 110°

B. 102°

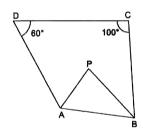
C. 100°

D. 120°

Answer: C



8. 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. 80°

B. 100°

C. 70°

D. 60°

Answer: A

