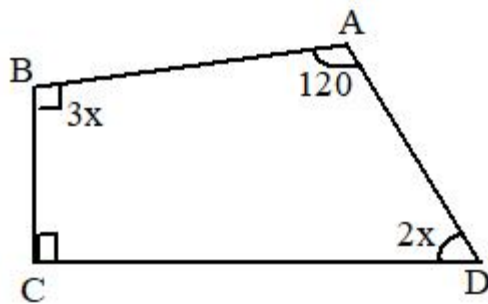


Revision Worksheet
Ch. Understanding Quadrilaterals

1. If the three angles of a quadrilateral are 70° , 90° and 120° , then find the measure of the fourth angle.
(a) 100° (b) 75° (c) 80° (d) 60°
2. Find the measure of each interior angle of a regular polygon with 12 sides.
(a) 150° (b) 160° (c) 130° (d) 180°
3. The measure of two adjacent angles of a parallelogram are in the ratio 2 : 3. Find the measure of the two angles.
(a) 72° , 108° (b) 54° , 112° (c) 68° , 99° (d) 86° , 114°
4. A quadrilateral whose all sides, diagonals and angles are equal is
(a) square (b) trapezium (c) rectangle (d) rhombus
5. Which of the following properties describe a trapezium?
(a) A pair of opposite sides is parallel.
(b) The diagonals bisect each other.
(c) The diagonals are perpendicular to each other.
(d) The diagonals are equal.
6. ABCD is a rhombus. If $\angle ACB = 40^\circ$, then $\angle ADB$ is equal to
a. 40° b. 45° c. 50° d. 60°
7. The angles of a quadrilateral are in the ratio 1: 2: 3: 4. The smallest angle is
a. 72 b. 144 c. 36 d. 18

8. The angle $\angle B$ in the figure is



- a. 30° b. 60° c. 90° d. 120°
9. Assertion (A): All the parallelograms are rectangles.
Reason (R): All the rhombuses are parallelograms.
(a) Both A and R are true, and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.

- (c) A is true but R is false.
 (d) A is false but R is true.

10. Assertion (A): Sum of all interior angles of a quadrilateral is 360° .

Reason (R): A parallelogram with one angle 90° is a rectangle.

- (a) Both assertion and reason are true and reason is the correct explanation for assertion.
 (b) Both assertion and reason are true but reason is not the correct explanation for assertion.
 (c) Assertion is true and reason is false.
 (d) Assertion is false and reason is true.

Subjective Questions

1. One angle of a quadrilateral is 120° and the remaining three angles are equal. Find the measure of each of the three equal angles.

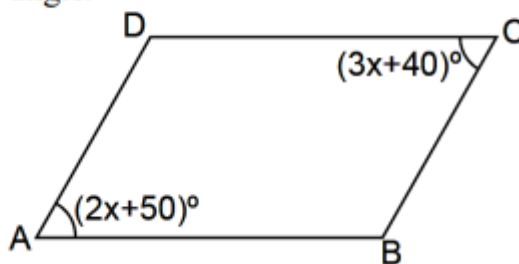
2. How many sides does a regular polygon have, if each of its interior angles is 165° ?

3.

ABCD is a parallelogram where $m\angle A = (2x + 50^\circ)$ and $m\angle C = (3x + 40^\circ)$.

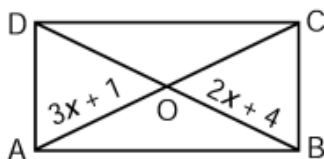
(i) Find the value of x

(ii) Find the measure of each angle.



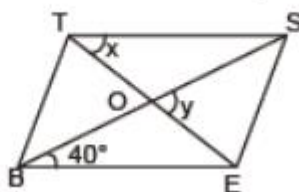
4.

. In the below figure, ABCD is a rectangle. Its diagonals meet at O. Find x , if $OA = 3x + 1$ and $OB = 2x + 4$.



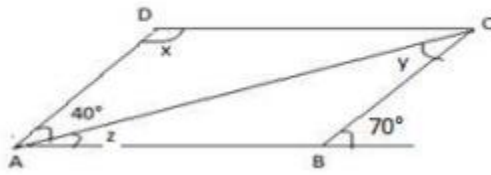
5.

In the given figure, BEST is a rhombus. Find the value of $y - x$.



6.

Find the values of x , y and z in the given parallelogram ABCD



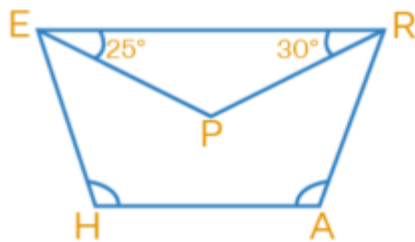
7.

ABCD is an isosceles trapezium in which AB and CD are parallel. Find the other angles.



8.

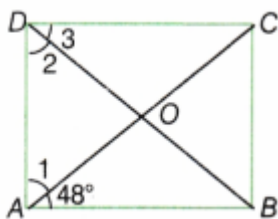
In trapezium HARE, EP and RP are bisectors of $\angle E$ and $\angle R$, respectively. Find $\angle HAR$ and $\angle EHA$.



9. In a parallelogram, the ratio of the adjacent sides is 4: 5 and its perimeter is 72 cm then, find the sides of the parallelogram.

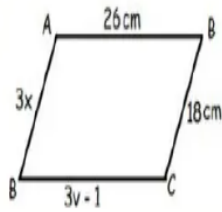
10.

In rectangle ABCD, if $\angle OAB = 48^\circ$ then find $\angle CDB$.



11.

In parallelogram ABCD. Find x and y.



12.

The angles of a pentagon are x° , $(x+20)^\circ$, $(x+40)^\circ$, $(x+60)^\circ$ and $(x+80)^\circ$. Then find all the angles of the pentagon.

13.

The sum of all interior angles of a regular polygon is 1080° . What is the measure of each of the interior angles?

14.

ABCD is a trapezium such that $AB \parallel CD$,

$\angle A : \angle D = 2:1$, $\angle B : \angle C = 7:5$.

Find the angles of the trapezium.

15.

What is the sum of all interior angles of a regular

(i) Nonagon (ii) polygon of 12 sides?

16. Find the measure of each exterior angle of a regular

(i) Decagon (ii) polygon of 15 side.

Answers

MCQ's

1. (c) 80° 2. (a) 150° 3. (a) 72° , 108° 4. (a) Square 5. (a) A pair of opposite sides is parallel
6. (c) 50° 7. (c) 36° 8. (c) 90° 9. C 10. B

Subjective

1. 80° each 2. 24 sides 3. (i) $x=10$ (ii) $A = C = 70^\circ$, $B = D = 110^\circ$
4. $x=3$ 5. $y-x = 40^\circ$ 6. $x= 110^\circ$ $y= 30^\circ$ $z= 30^\circ$
7. $\angle A = 80^\circ$ $\angle B = 100^\circ$ $\angle C = 100^\circ$ 8. $\angle HAR = 120^\circ$ $\angle EHA = 130^\circ$
9. 16cm and 20cm 10. $\angle CDB = 42^\circ$ 11. $x=6$ and $y=9$ 12. $68^\circ, 88^\circ, 108^\circ, 128^\circ, 148^\circ$
13. 135° 14. $\angle A = 120^\circ$ $\angle B = 105^\circ$ $\angle C = 75^\circ$ $\angle D = 60^\circ$
15. i. 1260° ii. 1800° 16. i. 36° ii. 24°