Understanding shapes-III special types of quadrilaterals Ex 17.1 Q12

Answer :

Opposite angles of a parallelogram are equal.

$\therefore \angle C = 70^\circ = \angle A.$

$\angle B = \angle D$

Also, the sum of the adjacent angles of a parallelogram is 180°.

$\therefore \angle A + \angle B = 180^\circ$

$70^\circ + \angle B = 180^\circ$

$\angle B = 110^\circ$

$\therefore \angle B = 110^\circ, \angle C = 70^\circ$ and $\angle D = 110^\circ$

Understanding shapes-III special types of quadrilaterals Ex 17.1 Q13

Answer :

Let the angles be A, B, C and D.

It is given that *the* sum of two opposite angles is 130°.

$\therefore \angle A + \angle C = 130^\circ$

$\angle A + \angle A = 130^\circ$ (opposite angles of a parallelogram are same)

$\angle A = 65^\circ$

and $\angle C = 65^\circ$

The sum of *adjacent angles of a parallelogram is* 180°.

$\angle A + \angle B = 180^\circ$

$65^\circ + \angle B = 180^\circ$

$\angle B = 180^\circ - 65^\circ$

$\angle B = 115^\circ$

$\angle D = 115^\circ$

$\therefore \angle A = 65^\circ$, v$\angle B = 115^\circ$, $\angle C = 65^\circ$ and $\angle D = 115^\circ$.

Understanding shapes-III special types of quadrilaterals Ex 17.1 Q14

Answer :

Let the angle be x.

All the angles are equal.

$\therefore x + x + x + x = 360^\circ$

$4x = 360^\circ$

$x = 90^\circ$

So, each angle is 90° and quadrilateral is a parallelogram. It is a rectangle.

********** END **********