



Understanding shapes-II Quadrilaterals Ex 16.1 Q10

Answer :

Let x be the measure of the equal angles of the quadrilateral.

Since, the sum of all the angles of a quadrilateral is 360° , we have :

$$x^\circ + x^\circ + x^\circ + 150^\circ = 360^\circ$$

$$\Rightarrow 3x^\circ = 360^\circ - 150^\circ$$

$$\Rightarrow x^\circ = 70^\circ$$

\therefore The measure of each angle is 70° .

Understanding shapes-II Quadrilaterals Ex 16.1 Q11

Answer :

Let the angles be in the ratio $3x : 5x : 7x : 9x$.

Since, the sum of all the angles of a quadrilateral is 360° , we have :

$$3x + 5x + 7x + 9x = 360^\circ$$

$$\Rightarrow 24x = 360^\circ$$

$$\Rightarrow x = 15^\circ$$

Thus, the angles are :

$$3x = 45^\circ$$

$$5x = 75^\circ$$

$$7x = 105^\circ$$

$$9x = 135^\circ$$

Understanding shapes-II Quadrilaterals Ex 16.1 Q12

Answer :

Let $(x + y)$ be the sum of the remaining two angles.

Since, the sum of all the angles of a quadrilateral is 360° , we have :

$$180^\circ + (x + y)^\circ = 360^\circ$$

$$\Rightarrow (x + y)^\circ = 180^\circ$$

\therefore The sum of the remaining two angles is 180° .

***** END *****