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 :
$x^\circ + x^\circ + x^\circ + 150^\circ = 360^\circ$
$\Rightarrow 3x^\circ = 360^\circ - 150^\circ$
$\Rightarrow x^\circ = 210^\circ$
$\therefore$ 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 **********