Quadrilaterals Ex 14.1 Q1

Answer:

Let the measure of the fourth angles be $x°$. We know that the sum of the angles of a quadrilateral is 360°.

Therefore,

$$110 + 50 + 40 + x = 360$$
$$200 + x = 360$$
$$x = 360 - 200$$
$$x = \boxed{160}$$

Hence the measure of the fourth angle is $\boxed{160^0}$.

Quadrilaterals Ex 14.1 Q2

Answer:

We have, $\angle A : \angle B : \angle C : \angle D = 1 : 2 : 4 : 5$.

So, let $\angle A = x$,

$\angle B = 2x$,

$\angle C = 4x$

And $\angle D = 5x$

By angle sum property of a quadrilateral, we get:

$$\angle A + \angle B + \angle C + \angle D = 360$$
$$x + 2x + 4x + 5x = 360$$
$$12x = 360$$
$$x = \frac{360}{12}$$

$$x = \boxed{30}$$

$$\angle A = x$$

$$\angle A = \boxed{30^0}$$

Also,

$$\angle B = 2x$$

$$\angle B = 2(30^0)$$

$$\angle B = \boxed{60^0}$$

And

$$\angle C = 4x$$

$$\angle C = 4(30^0)$$

$$\angle C = \boxed{120^0}$$

Similarly,

$$\angle D = 5x$$

$$\angle D = 5(30^0)$$

$$\angle D = \boxed{150^0}$$

Hence, the four angles are $\boxed{30^0}$, $\boxed{60^0}$, $\boxed{120^0}$ and $\boxed{150^0}$.

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