

Quadrilaterals Ex 14.2 Q6

Answer:

It is given that ABCD is a parallelogram with $\angle A = 70^{\circ}$



We know that the opposite angles of the parallelogram are equal.

Therefore,

$$\angle C = \angle A$$

$$\angle C = \boxed{70^{\circ}}$$

Also, $\angle A$ and $\angle D$ are adjacent angles, which must be supplementary.

Therefore,

$$\angle A + \angle D = 180^{\circ}$$

$$70^{\circ} + \angle D = 180^{\circ}$$

$$\angle D = 180^{\circ} - 70^{\circ}$$

$$\angle D = \boxed{110^0}$$

Also, $\angle B$ and $\angle D$ are opposite angles of a parallelogram.

Therefore,

$$\angle B = \angle D$$

$$\angle B = 110^{\circ}$$

Hence, the angles of a parallelogram are 70° , 110° , 70° and 110°

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