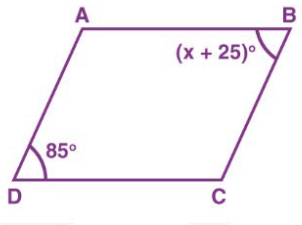
Understanding Quadrilaterals

Angles of Parallelogram

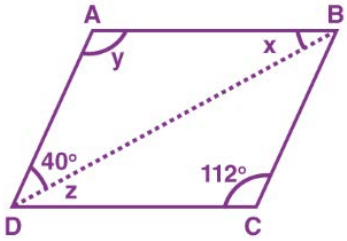
EXERCISE

Q1. In the adjoining figure, ∠D = 85° and ∠B = (x + 25)°, find the value of x.



Q2. Two adjacent angles of a parallelogram are in the ratio 4 : 5. Find their measures.

Q3. Find x, y, z, the below figure.



Q4. In a parallelogram, if one angle measures 60 degrees, what is the measure of its opposite angle, and what is the sum of the measures of its adjacent angles?

ANSWER KEY

1. x = 60°

2. 100°.

3. x = 28°, y = 112° and z = 28°.

4. In a parallelogram, if one angle measures 60 degrees, its opposite angle will also measure 60 degrees since opposite angles in a parallelogram are congruent. Additionally, the sum of the measures of its adjacent angles will be 120 degrees since consecutive (adjacent) angles in a parallelogram are supplementary, meaning they add up to 180 degrees, and in this case, 180 degrees - 60 degrees (the given angle) = 120 degrees for the sum of the adjacent angles.