3.4.5

EE24BTECH11030 - J.KEDARANANDA

Question:
Construct a rhombus whose side is of length 3.4 cm and one of its angles is 45° .
Solution:

Variable	Parameter	Value
$Side$	a	3.4 cm
$Angle\,(1)$	$\angle A$	45°
$Angle\,(2)$	$\angle B$	

TABLE 0

We have a rhombus with one angle $\angle A$ given as 45°. Let the second angle be $\angle B$. The relationship between the angles in a rhombus can be expressed as:

$$\angle A + \angle B = 180^\circ \tag{0.1}$$
$$45^\circ + B = 180^\circ \tag{0.2}$$
$$\angle B = 180^\circ - 45^\circ \tag{0.3}$$
$$\angle B = 135^\circ \tag{0.4}$$

Thus, the second angle in the rhombus is $\angle B = 135^\circ$.

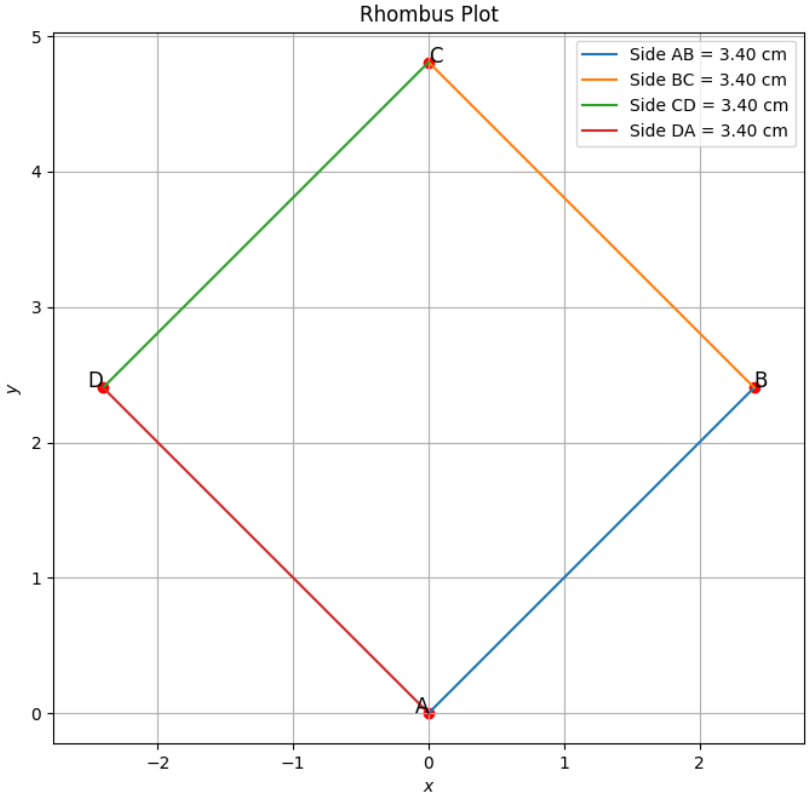
Rhombus Plot
Side AB = 3.40 cm
Side BC = 3.40 cm
Side CD = 3.40 cm
Side DA = 3.40 cm
A
B
C
D
x
y
5
4
3
2
1
0
−2
−1
0
1
2

Fig. 0.1