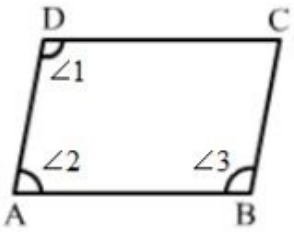
Exercise 14A



Q12

Answer :

Given :

$l \parallel m$

$p \parallel q$

$\angle 1 = 65^\circ$

$\therefore \angle 1 = \angle a = 65^\circ$ **(vertically opposite angles)**

$\angle a + \angle d = 180^\circ$ (consecutive interior angles on the same side of a transversal are supplementary)

or $\angle d = 180^\circ - 65^\circ = 115^\circ$

$\angle c + \angle d = 180^\circ$ (consecutive interior angles on the same side of a transversal are supplementary)

or $\angle c = 180^\circ - 115^\circ = 65^\circ$

$\angle c + \angle b = 180^\circ$ (consecutive interior angles on the same side of a transversal are supplementary)

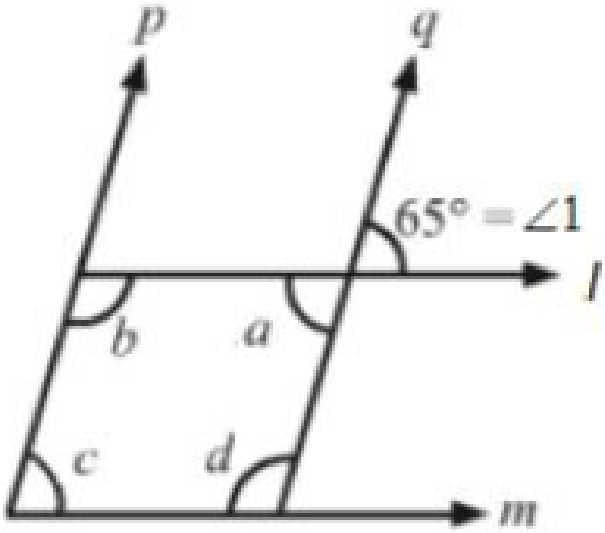
or $\angle b = 180^\circ - 65^\circ = 115^\circ$

$\therefore \angle a = 65^\circ$

$\angle b = 115^\circ$

$\angle c = 65^\circ$

$\angle d = 115^\circ$



Q13

Answer :

Given :

$\mathbf{AB \parallel DC}$

$\mathbf{AD \parallel BC}$

$\mathbf{\angle BAC = 35^\circ}$

$\mathbf{\angle CAD = 40^\circ}$

$\therefore \angle \mathrm{BAC} = \mathrm{y} = 35^\circ$ (alternate angles when AB ∥ DC)

$\angle \mathrm{CAD} = \mathrm{x} = 40^\circ$ (alternate angles when AD ∥ BC)

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