Lines and angles Ex 14.2 Q2

Answer :

$\angle ALM = \angle CMQ = 60^\circ$ (Corresponding angles)

$\angle LMD = \angle CMQ = 60^\circ$ (Vertically opposite angles)

$\angle ALM = \angle PLB = 60^\circ$ (Vertically opposite angles)

Since

$\angle CMQ + \angle QMD = 180^\circ$ (Linear pair)

$\therefore \angle QMD = 180^\circ - 60^\circ = 120^\circ$

$\angle QMD = \angle MLB = 120^\circ$ (Corresponding angles)

$\angle QMD = \angle CML = 120^\circ$ (Vertically opposite angles)

$\angle MLB = \angle ALP = 120^\circ$ (Vertically opposite angles)

Lines and angles Ex 14.2 Q3

Answer :

In the given Fig., AB || CD.

$\angle ALM = \angle LMD = 35^\circ$ (Alternate interior angles)

Since $\angle PLA + \angle ALM = 180^\circ$ (Linear pair)

$\therefore \angle PLA = 180^\circ - 35^\circ = 145^\circ$

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