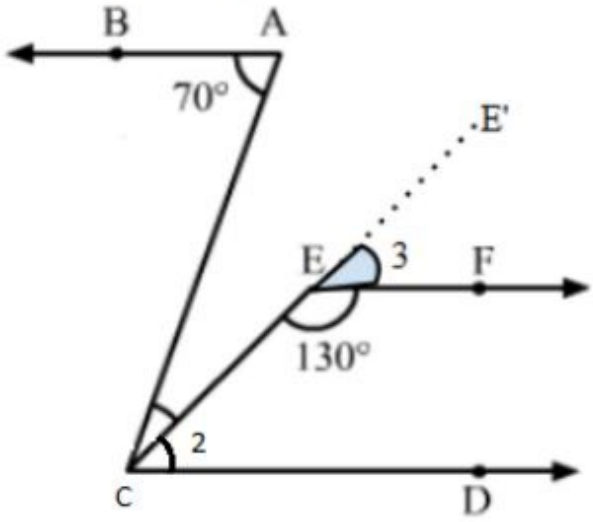
Lines and angles Ex 14.2 Q14

Answer :

In the given figure, *AB* || *CD* and *CD* || *EF*.

Extend line *CE* to *E*'.



Thus, we have:

$\angle BAC = \angle ACD = 70^\circ$ (Alternate angles)

Now,

$\angle 3 + \angle CEF = 180^\circ$ (Linear pair)

$\Rightarrow \angle 3 = 180^\circ - \angle CEF = 180^\circ - 130^\circ = 50^\circ$

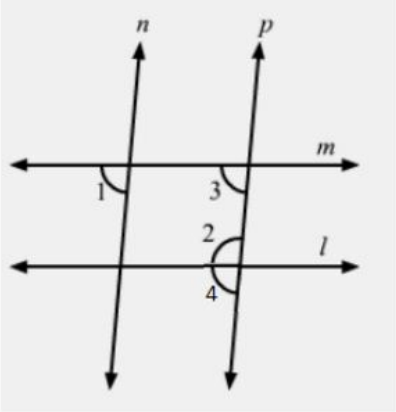
Since CD || EF, then

$\angle 2 = \angle 3 = 50^\circ$ (Corresponding angles)

$\angle ACE = \angle ACD - \angle 2 = 70^\circ - 50^\circ = 20^\circ$

Lines and angles Ex 14.2 Q15

Answer :



In the given figure, $l \parallel m$, $n \parallel p$ and $\angle 1 = 85°$.

Now, let $\angle 4$ be the adjacent angle of $\angle 2$.

Thus, we have:

$\angle 3 = \angle 1 = 85^\circ$ (Corresponding angles)

$\angle 3 + \angle 2 = 180^\circ$ (Sum of interior angles on the same side of the transversal)

$\therefore \angle 2 = 180^\circ - \angle 3 = 180^\circ - 85^\circ = 95^\circ$

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