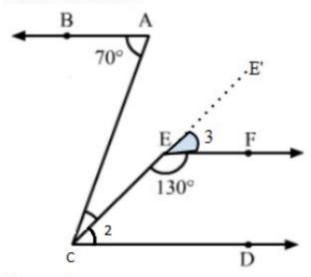


Lines and angles Ex 14.2 Q14

Answer:

In the given figure, $AB \parallel CD$ and $CD \parallel EF$. 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)

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

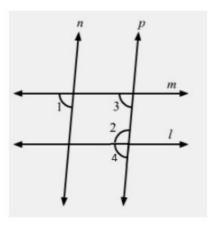
Since CD || EF, then

$$\angle 2 = \angle 3 = 50^{\circ}$$
 (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, $I \parallel m, n \parallel p$ and $\angle 1 = 85^{\circ}$.

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 *******