

Lines and angles Ex 14.2 Q12

## Answer:

In the given figure,  $I \parallel m \parallel n$  and p is a transversal line.

Thus, we have:

$$\angle 4+60^\circ=180^\circ$$
 (Linear pair)  
 $\Rightarrow \angle 4=180^\circ-60^\circ=120^\circ$   
 $\angle 4=\angle 1=120^\circ$  (Corresponding angles)  
 $\angle 1=\angle 2=120^\circ$  (Corresponding angles)  
 $\angle 3=\angle 2=120^\circ$  (Vertically opposite angles)  
Thus,

 $\angle 1 = \angle 2 = \angle 3 = 120^{\circ}$ 

## Lines and angles Ex 14.2 Q13 Answer:

In the given figure,  $I \parallel m \parallel n$  and  $\angle 1 = 60^{\circ}$ .

Thus, we have:

$$\angle 3 = \angle 1 = 60^{\circ}$$
 (Corresponding angle)

Now,

$$\angle 3 + \angle 4 = 180^{\circ}$$
 (Linear pair)

$$\angle 4 = 180^{\circ} - \angle 3 = 180^{\circ} - 60^{\circ} = 120^{\circ}$$

$$\angle 2 = \angle 4 = 120^{\circ}$$
 (Alternate interior angles)

\*\*\*\*\*\*\* END \*\*\*\*\*\*