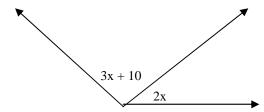
## Class : IX

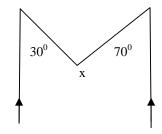
## **Subject: Mathematics**

## **Assignment 2: Lines and Angles**

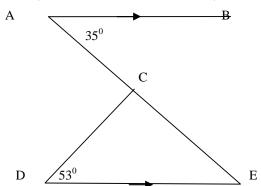
- 1. An angle is 14<sup>0</sup> more than its complementary angle. What is its measure?
- 2. If the supplement of an angle is three times its complement, find the angle.
- 3. What value of x will make POQ a line?



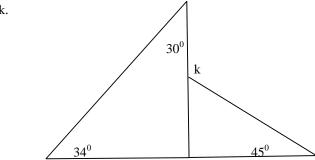
4. In the given figure, AB // ED and  $\angle$ ABC =  $30^{\circ}$ ,  $\angle$ EDC =  $70^{\circ}$ . Find the value of x.



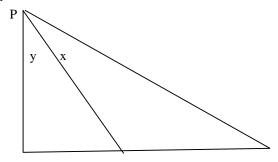
5. In the given figure AB // DE,  $\angle$ BAC = 35 $^{\circ}$  and  $\angle$ CDE = 53 $^{\circ}$ , find  $\angle$ DCE.



- 6. If the angles of a triangle are in the ratio 3:7:10, what kind of a triangle is it?
- 7. The sum of two angles of a triangle is 800 and their difference is 200. Find the angles of the triangle. Find the value of k.



8. Find the value of x and y and find the relation between them.



 $\begin{array}{ccc} & & 120^0 & & 30^0 \\ Q & & R & & S \end{array}$ 

9. Three friends walk away from a point in three different directions such that the path of each is equally inclined to those of the other two. Find the angles their paths make with one another.