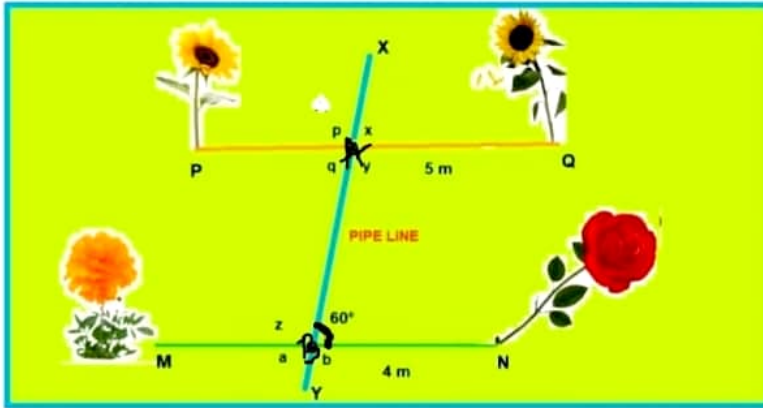


16. Read the Source/Text given below and answer any four questions:

Once 4 students from class IX F were selected for plantation of flower plants in the school garden. The selected students were Pankaj, Raju, Deepak and Renu.



As shown PQ and MN are the parallel lines of the plants.

Pankaj planted a sunflower plant at P, then Raju planted another sunflower at Q.

Further, Deepak was called to plant any flowering plant at point M. He planted a marigold there.

Now it was the turn of Renu, She was told to plant a flowering plant different from the three

1

planted one

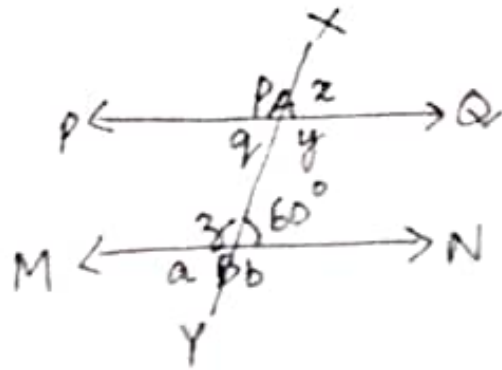
So she planted a rose plant at N.

There was a water pipeline XY which intersects PQ and MN at A and B and $\angle XBN = 60^\circ$

Answer the following questions

- i. What is the value of $\angle z$?
 - a. 60°
 - b. 120°
 - c. 180°
 - d. 100°
- ii. What is the value of $\angle x$?
 - a. 60°
 - b. 120°
 - c. 180°
 - d. 100°
- iii. What is the value of $p + q$?
 - a. 60°
 - b. 120°
 - c. 180°
 - d. 100°
- iv. Which angle is the corresponding angle to $\angle a$?
 - a. $\angle z$
 - b. $\angle p$
 - c. $\angle b$
 - d. $\angle q$
- v. What is the value of $(p+q+a+z)/6$?
 - a. 60°
 - b. 120°
 - c. 180°
 - d. 100°

IX Case - Study 6 (Answers)



(i) $\angle z = 180^\circ - 60^\circ = 120^\circ$ (b)
[linear pair]

(ii) $x = 60^\circ$ [corresponding angles] (a)

(iii) $p + q = 180^\circ$ (linear pair) (c)

(iv) $\angle a = \angle q$ (corresponding angles) (d)

(v) $\frac{p+q}{6} + \frac{a+z}{6} = \frac{180+180}{6} = \frac{360}{6}$
 $= 60^\circ$ (a)