N XOR 23 = 45

Propeaty

A XOR B XOR B = A.

∴ N XOR 23 XOR 23 = N

45 XOR 23 = N

$(23)_{10} = (00010111)_2$

$(45)_{10} = (00101101)_2$

XOR them :-

$$\begin{array}{r} 00010111 \\ \oplus\ 00101101 \\ \hline 00111010 \end{array}$$

convert them into decimal.

$$(0\ 0\ 1\ 1\ 1\ 0\ 1\ 0)_2 = 0\times 2^0 + 1\times 2^1 + 0\times 2^2 + 1\times 2^3 + 1\times 2^4 + 1\times 2^5 + 0\times 2^6 + 0\times 2^7$$

$$= 0 + 2 + 0 + 8 + 16 + 32 + 0 + 0$$

$$= 2 + 8 + 16 + 32$$

$$= 10 + 48$$

$$= (58)_{10}$$

$\therefore$ N is $(58)_{10}$