

If  $p$  and  $q$  are the roots of the equation  $x^2 + px + q = 0$ , then

(a)  $p = 1, q = -2$

(b)  $p = 0, q = 1$

(c)  $p = -2, q = 0$

(d)  $p = -2, q = 1$

**Solution:**

Given  $x^2 + px + q = 0$

Sum of roots,  $p + q = -p$

Product of roots,  $pq = q$

$\Rightarrow p = 1$

$1 + q = -1$

$\Rightarrow q = -2$

So  $p = 1, q = -2$ .

Hence option a is the answer.