A single fair 6-sided die is thrown, If X is random variable representing the number of dots showing on the die, determine the probability distribution of X
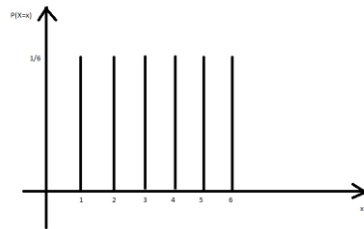
[**Solution**]

Possible values of X are given by x = 1, 2, 3, 4, 5, 6

The probability distribution associated with X can be given in the **table** from

x	1	2	3	4	5	6
P(X=x)	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

Or expressed as **formular**: $P(X = x) = \frac{1}{6}$ for x=1, 2, 3, 4, 5, 6

Or expressed as graph: