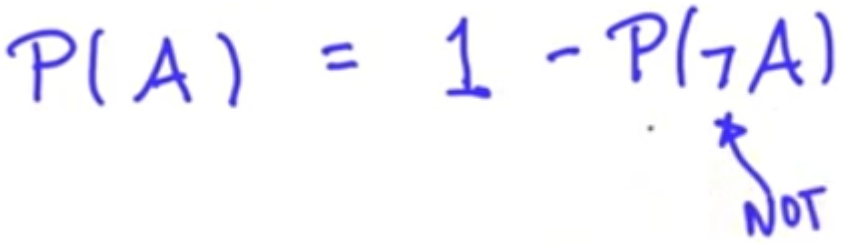
Probability

It is the opposite of statistics as in statistics we use analyse data, in probability we predict data using assumptions we make about it.
Basic probability law : The probability of an event is 1 - the probability of opposite event

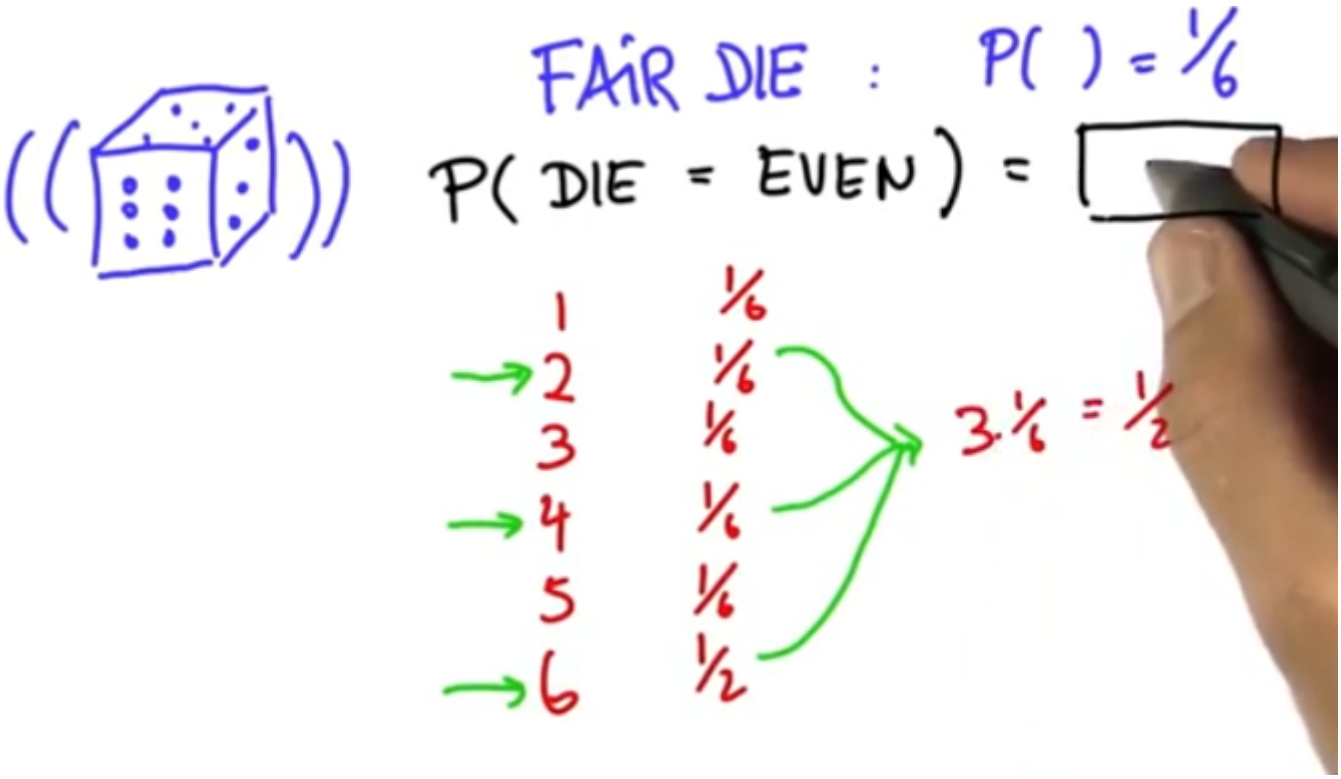


You can get the probability of a composite event which is the probability (p) times how many event wanted:
EX:

how many times can you flip a coin and get a tails :

solution is the P(tails) * P(tails)

EX: (with solution) how many times can you get an even number on a die flip: the outcome is 0.5



EX2: how many times can you get a double (same number) in a fair dice thrown twice

THROW A FAIR DIE TWICE!

$P(\text{DOUBLE}) = \boxed{0.16667}$

THROW-1	THROW-2	
1	1	$\rightarrow 1/6 \cdot 1/6 = 1/36$
2	2	$= 1/36$
3	3	$\vdots$
4	4	
5	5	$= 1/36$
6	6	

$\Sigma = \frac{1}{6}$