math

Bishal sarker

2022-11-19

Let A nd B are two teams. Last 5 matches for A is ={ W,W,W,W,L}. so robability of win is $P(W) = \frac{4}{5}$.
The last 5 matches for B is ={ W,L,L,W,W}. So the win probability is $P(W) = \frac{3}{5}$.
Now A nd B takes each other 25 times and among them A wins 12 and B wins 11 times. So the prior win probability for A is $P_0(W) = \frac{12}{25}$ and B is $P_0(W) = \frac{11}{25}$. So now if A and B takes each other then the probability that A will win is ,

$P(WIN) = $ prior * latest $

$$P_A W = \frac{4}{5} * \frac{12}{25} = .384$$

and win probability for B is ,

$$P_A W = \frac{3}{5} * \frac{1}{25} = .264$$

now standarized the probability that A and B will win the game ,

$$P(A) = \frac{.384}{.384 + .264}$$
$$= .6$$
$$P(B) = \frac{..264}{.384 + .264}$$
$$= .4$$

So the probability that A will win is 60% and
B will win is 40%.