

class 12 probality

May 25, 2023

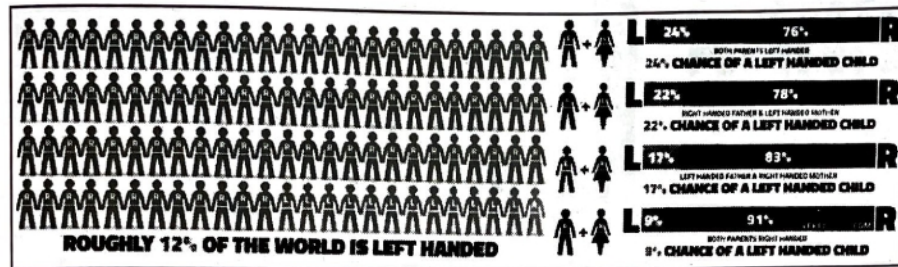
1. If A and B are two events such that $\Pr(A|B) = 2 \Pr(B|A)$ and $\Pr(B) + \Pr(A) = \frac{2}{3}$, then $\Pr(A)$ is equal to

- | | |
|-------------------|-------------------|
| (a) $\frac{2}{9}$ | (c) $\frac{4}{9}$ |
| (b) $\frac{7}{9}$ | (d) $\frac{5}{9}$ |

2. a) Two balls are drawn at random one by one with replacement from an urn containing equal number of red balls and green balls. Find the probability distribution of number of red balls. Also, find mean of random variable

OR

- b) A and B throw a die alternately till one of them gets a '6' and wins the game. Find their respective probabilities of winning, if A starts the game first. Recent studies suggest that roughly 12% of the world population is lefthanded. Depending upon the parents, the



chance of having a left handed child are follows:

A: When both father and mother are handed
: chances of left handed child is 24%