



Tutorial-2

1. A CRV X that can assume any value between $x=2$ and $x=5$ has a density function given by $f(x) = k(1+x)$. Find k .
2. X and Y are independent random variables with variance 2 and 3. Find the variance of $3X+4Y$.
3. The mean of a Binomial distribution is 20 and S.D is 4. Determine the parameters of the distribution.
4. Out of 800 families with 4 children each how many families would be expected to have
 - i. 2 Boys and 2 Girls
 - ii. At least 1 boy
 - iii. At most 2 girls
 - iv. Children of both gender, Assume equal probabilities for boys & girls.