

$$p=\frac{1}{2}$$
, $q=\frac{1}{2}$

Using Binomial Dieteilution,

$$P(X=x) = b(x; K, p) + x=K, K+1, K+2, \dots$$

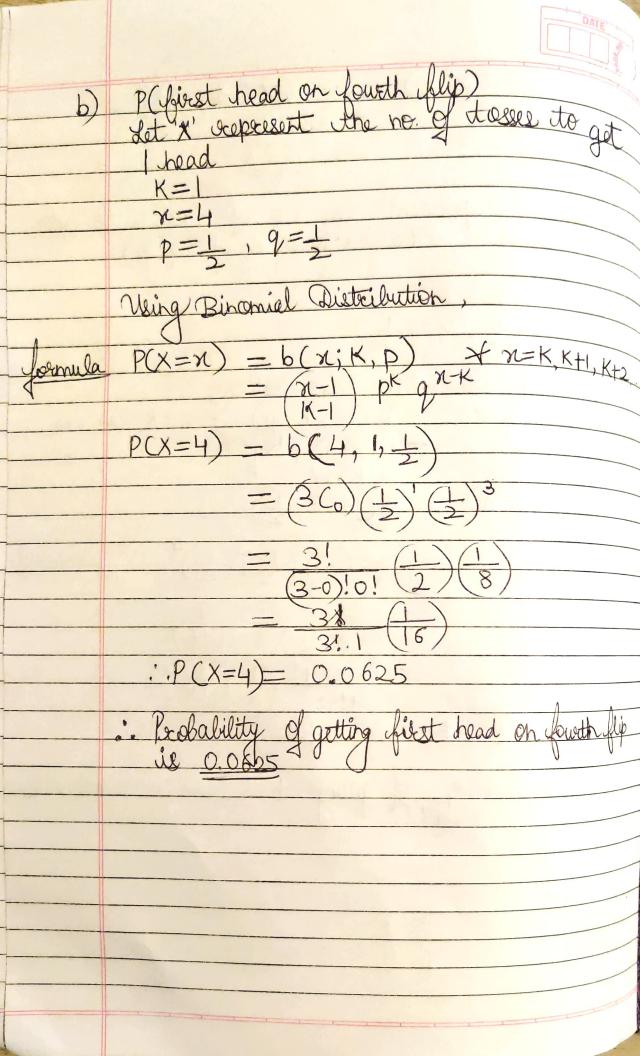
 $= (x-1) p k g x-K$

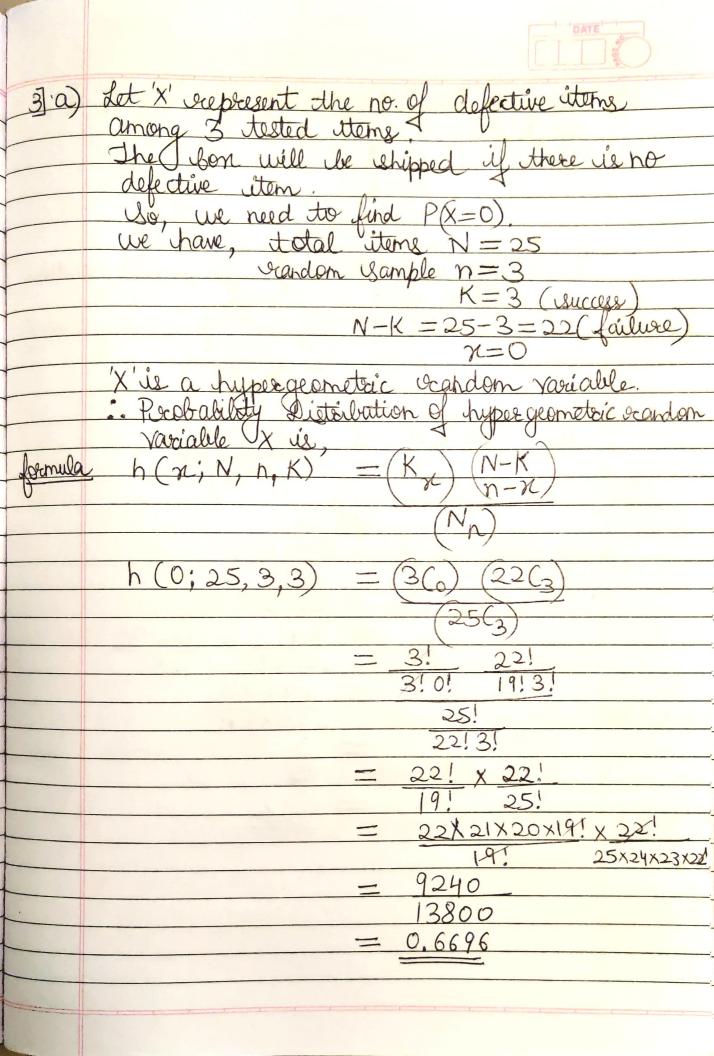
$$P(X=+) = b(+,3,\pm)$$

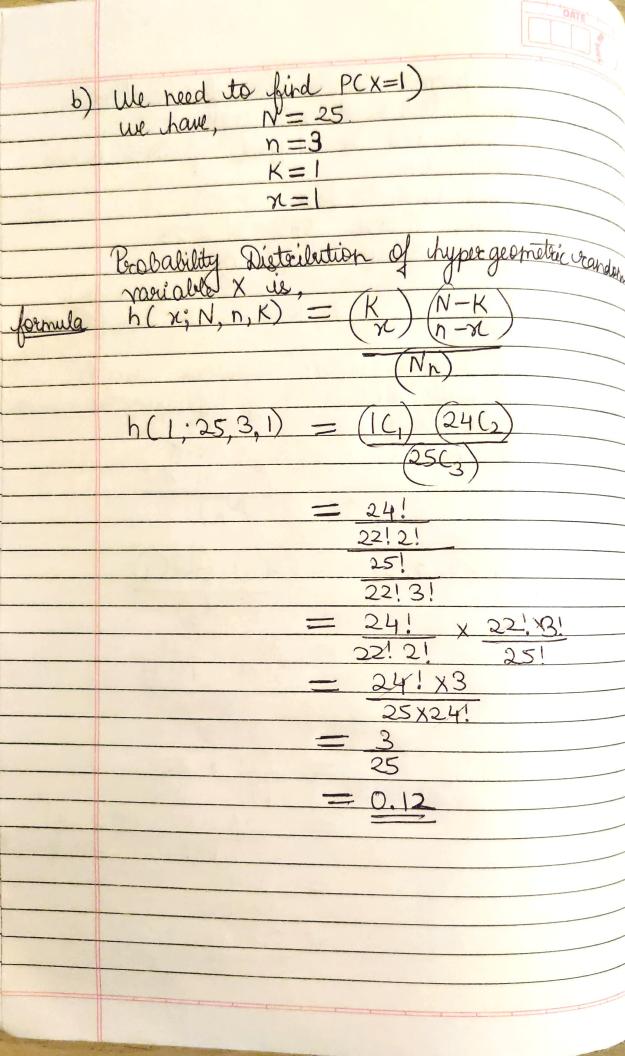
$$= \left(6C_2\right)\left(\frac{1}{2}\right)^3\left(\frac{1}{2}\right)^4$$

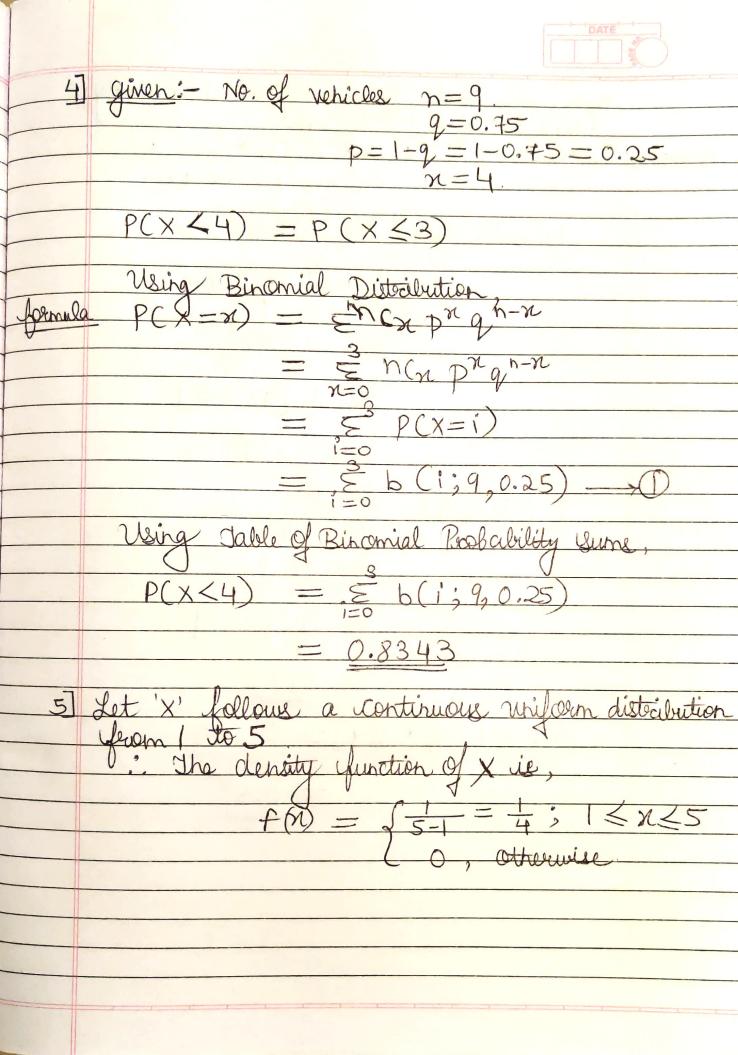
$$= \frac{6x5x4!}{4!x2!} \left(\frac{1}{8}\right) \left(\frac{1}{16}\right)$$

$$P(X=7) = 0.1172$$









Now, lote find the conditional ($f_{xy}(x|y) = f(x_1y)/f_y(y)$ formula $P(x > 2.5 | X \le 4) = P(2.5 < y)$ P(2.5<X4) :. P(X72.5)X