



b) Using Lagrange's interpolation formula find $f(6)$ from the following data :

x	3	7	9	10
f(x)	168	120	72	63

OR

13. a) Using Newton's divided difference table find $f(7)$ from the following data :

x	2	5	8	10	12
y	4.4	6.2	6.7	7.5	8.7

b) Evaluate $\int_1^5 \log_{10} x \, dx$ by Trapezoidal rule dividing the interval (1, 5) into 8 equal intervals.

x	1	2	3	4	5
f(x)	1	8	27	64	125

OR

x	0	1	2	3
f(x)	1	5	1	10