

Sample Question 1: The following is the cumulative frequency distribution (of less than type) of 1000 persons each of age 20 years and above. Determine the mean age.

Age below (in years)	30	40	50	60	70	80
Number of persons	100	220	350	750	950	1000

Solution : First, we make the frequency distribution of the given data and then proceed to calculate mean by computing class marks (x_i), u_i 's and $f_i u_i$'s as follows :

Class	Frequency (f_i)	Class mark (x_i)	$u_i = \frac{x_i - 45}{10}$	$f_i u_i$
20-30	100	25	-2	-200
30-40	120	35	-1	-120
40-50	130	45	0	0
50-60	400	55	1	400
60-70	200	65	2	400
70-80	50	75	3	150
	$f_i = 1000$			$f_i u_i = 630$