

12. Class	f	x	u	fu
20-25	84	22.5	-3	-252
25-30	90	27.5	-2	-180
30-35	108	32.5	-1	-108
35-40	94	37.5	0	0
40-45	72	42.5	1	72
45-50	38	47.5	2	76
50-55	18	52.5	3	54
55-60	5	57.5	4	20
	$n=509$			$\Sigma fu = -318$

Assumed  $A = 37.5$

$$\text{Let } u = \frac{x - A}{d} = \frac{x - 37.5}{5}$$

$$\therefore \bar{x} = A + \frac{\Sigma fu}{n} \times d$$

$$= 37.5 + \left( \frac{-318}{509} \times 5 \right)$$

$$= 37.5 - \frac{1590}{509}$$

$$= 37.5 - 3.12$$

$$= 34.38 \text{ years Ans.}$$