

3.

ages	no. of persons f_i	class Marks x_i	$u_i = \frac{x_i - a}{h}$	$f_i u_i$
0 - 10	10	5	-3	-30
10 - 20	15	15	-2	-30
20 - 30	25	25	-1	-25
30 - 40	25	35 = a	0	0
40 - 50	10	45	1	10
50 - 60	10	55	2	20
60 - 70	5	65	3	15
	100			-40

$$\text{Mean age} = a + \frac{\sum f_i u_i}{\sum f_i} \times h$$

$$= 35 + \frac{-40}{100} \times 10$$

$$= 35 - 4$$

$$= 31 \text{ years}$$