

NCERT Maths Class X-Statistics Ex 14.1 - Question 3
Solutions by Dev Anoop (Bathinda)

Daily Pocket Allowance	No. of Children f_i	Class Marks x_i	$f_i x_i$
11-13	7	12	84
13-15	6	14	84
15-17	9	16	144
17-19	13	18	234
19-21	f	20	$20f$
21-23	5	22	110
23-25	4	24	96
Total	$44+f$		$752+20f$

$$\text{Mean} = \frac{\sum f_i x_i}{\sum f_i} = \frac{752+20f}{44+f}$$

$$\Rightarrow 18 = \frac{752}{44+f}$$

$$\Rightarrow 18f + 792 = 752 + 20f$$

$$\Rightarrow 792 - 752 = 20f - 18f$$

$$\Rightarrow 2f = 40$$

$$\Rightarrow f = 20$$

Method Used - Direct Method, Since values are small