

NCERT Maths Class X-Statistics Ex 14.1 - Question 6
Solutions by Dev Anoop (Bathinda)

Daily Exp. (in Rs)	No. of Houses f_i	Class Marks x_i	$U_i = \frac{x_i - a}{h}$	$f_i U_i$
100-150	4	125	-2	-8
150-200	5	175	-1	-5
200-250	12	225	0	0
250-300	2	275	1	2
300-350	2	325	2	4
Total	25			-7

$$\begin{aligned}\text{Mean} &= a + \frac{\sum f_i U_i}{\sum f_i} \times h \\ &= 225 + \frac{-7}{25} \times 50 \\ &= 211\end{aligned}$$

Mean daily expenditure = Rs 211

Method Used - Step Deviation, Here Class Marks have comparatively bigger values