

Ex 3.4 Question 2

2⑤ let fixed charge for first 3 days = Rs  $x$   
 charge per day = Rs  $y$

acc to condition I

$$x + 4y = 27 \dots \textcircled{I}$$

[additional days = 7-3  
= 4]

acc to condition II

$$x + 2y = 21 \dots \textcircled{II}$$

[additional days = 5-3  
= 2]

$$\textcircled{I} - \textcircled{II}$$

$$\begin{array}{r} x + 4y = 27 \\ x + 2y = 21 \\ \hline 2y = 6 \end{array}$$

$$\Rightarrow y = \frac{6}{2} = 3$$

Sub  $\textcircled{I}$

$$x + 4 \times 3 = 27$$

$$\begin{aligned} \Rightarrow x &= 27 - 12 \\ &= 15 \end{aligned}$$

$\therefore$  fixed charge = Rs 15

charge per day = Rs 3