

## NCERT Solutions by Dev Anoop (Bathinda)

### Ex 3.7 Question 2



② let Money with friend A = Rs  $x$

Money with friend B = Rs  $y$

acc. to condition I | acc. to condition II

$$x + 100 = (y - 100) \times 2$$

$$\Rightarrow x + 100 = 2y - 200$$

$$\Rightarrow x - 2y = -300 \dots \textcircled{1}$$

$$(x - 10) \times 6 = y + 10$$

$$6x - 60 = y + 10$$

$$\Rightarrow 6x - y = 70 \dots \textcircled{2}$$

$$\textcircled{1} \times 1 - \textcircled{2} \times 2$$

$$x - 2y = -300$$

$$12x - 2y = 140$$

$$\begin{array}{r} - \\ + \\ \hline -11x = -440 \end{array}$$

$$\Rightarrow x = \frac{-440}{-11}$$

$$= 40$$

Sub in  $\textcircled{1}$

$$40 - 2y = -300$$

$$2y = 340$$

$$y = \frac{340}{2}$$

$$= 170$$

$\therefore$  Money with friend A = Rs 40

Money with friend B = Rs 170