



### Pair of Linear Equations in Two variables Ex 3.11 Q21

**Answer :**

21. Let the money with first person be  $Rs\,x$  and the money with the second person be  $Rs\,y$ . Then,

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

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

If first person gives  $Rs\,100$  to second person then the second person will become twice as rich as first person, According to the given condition, we have,

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

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

$$x-2y+100+200 = 0$$

$$x-2y+300 = 0 \dots (i)$$

If second person gives  $Rs\,10$  to first person then the first person will become six times as rich as second person, According to given condition, we have,

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

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

$$0 = 6x-60-y-10$$

$$0 = 6x-y-70 \dots (ii)$$

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\*\*\*\*\* END \*\*\*\*\*