



Pair of Linear Equations in Two variables Ex 3.11 Q18

Answer :

Let $Rs. x$ be the notes of $Rs. 50$ and $Rs. 100$ notes will be $Rs. y$

If Meena ask for $Rs. 50$ and $Rs. 100$ notes only, then the equation will be,

$$50x + 100y = 2000$$

Divide both sides by 50 then we get,

$$x + 2y = 40 \dots (i)$$

If Meena got 25 notes in all then the equation will be,

$$x + y = 25 \dots (ii)$$

By subtracting the equation (ii) from (i) we get,

$$x + 2y = 40$$

$$-x - y = -25$$

$$1y = 15$$

$$y = \frac{15}{1}$$

$$y = 15$$

Substituting $y = 15$ in equation (ii) , we get

$$x + y = 25$$

$$x + 15 = 25$$

$$x = 25 - 15$$

$$x = 10$$

Therefore $x = 10$ and $y = 15$

Hence, Meena has $\boxed{10}$ notes of $Rs. 50$ and $\boxed{15}$ notes of $Rs. 100$

Pair of Linear Equations in Two variables Ex 3.11 Q19

Answer :

Let take right answer will be x and wrong answer will be y .

Hence total number of questions will be $x + y \dots (i)$

If yash scored 40 marks in atleast getting 3 marks for each right answer and losing 1 mark for each wrong answer then

$$3x - 1y = 40 \dots (ii)$$

If 4 marks awarded for each right answer and 2 marks deducted for each wrong answer the he scored 50 marks

$$4x - 2y = 50 \dots (iii)$$

By multiplying equation (i) by 2 we get

$$6x - 2y = 80 \dots (iv)$$

By subtracting (iii) from (iv) we get

$$6x - 2y = 80$$

$$-4x + 2y = -50$$

$$2x = 30$$

$$x = \frac{30}{2}$$

$$x = 15$$

Putting $x = 15$ in equation (ii) we have

$$3x - 1y = 40$$

$$3 \times 15 - 1y = 40$$

$$45 - 1y = 40$$

$$-1y = 40 - 45$$

$$\cancel{-}y = \cancel{-}5$$

Total number question will be

$$= x + y$$

$$= 15 + 5$$

$$= 20$$

Hence, the total number of question is 20.

***** END *****