Answer on question 38035 – Math – Linear Algebra

A retailer has two types of sugar priced at Rs 13 and Rs 18 per kg. He wants to sell the mixture of these 2 types at a uniform price of Rs 15 per kg. In what proportion should he mix them so that there is no change in his revenue? Hint: take x+y=100

Let x is the amount the sugar priced at 13 per kg, y is the amount the sugar priced at 18 per kg.

The amount of sugar which we should sell is 13x+18y, and it is equal to 15(x+y). We obtain the following equation

$$13x + 18y = 15(x + y)$$

$$3y = 2x$$

$$\frac{x}{y} = \frac{3}{2}$$

Answer: the proportion 3:2.