Answer on Question #58558 – Math – Algebra

Question

One litre of milk costs N$X in a supermarket. The cost of a six-pack of 100ml of fruit juice costs N$15 more than the cost of one litre of milk. Hillman pays N$ 95 for three one litre bottles of milk and two six packs of fruit juice. Write the equation in terms of x, representing this formation

Solution

Let the price of one bottle of milk be

$$Pm = N\$ X,$$

the price of the pack of juice be

$$Pj = N\$X + N\$ 15$$

and

$$3Pm + 2Pj = N\$ 95,$$

so the equation in terms of x, representing this formation is

$$3x + 2(x + 15) = 95,$$
$$3x + 2x + 30 = 95,$$
$$5x = 65,$$
$$x = 13.$$

So, the price of one bottle of milk is Pm = N$13 and the price of the pack of juice is

$$Pj = N\$13 + N\$ 15 = N\$28.$$