Answer on Question #53317 – Math – Algebra

For every 4 chairs Paul needs 3 tables. Given he has 27 tables how many chairs does he need?

Solution

In given problem we need to apply the methodology of proportion. We know that for every 4 chairs Paul needs 3 tables, according to the condition of the task we have to find the number of chairs if the given number of tables is equal to 27.

Now, we need to create the proportion.

For every 4 chairs   -   3 tables

For every x chairs   -   27 tables

From the noted above proportion, we can determine the number of chairs. Now, we apply the method of cross-multiplication.

$$x = \frac{4 \cdot 27}{3} = \frac{108}{3} = 36 \text{ (chairs)}$$

Thus, we can conclude that for 27 tables Paul needs 36 chairs.