**Answer to Question #50279, Math**

The cooling system of Ennio's car contains 7.5 L of coolant, which is 100/3 % antifreeze. How much of this solution must be drained from the system and replaced with 100% antifreeze so that the solution in the cooling system will contain 50% antifreeze?

**Answer.**

**Let $x$ be the volume of the drained and replaced solution, then:**

$$(7.5 - x) * \frac{1}{3} + x * 1 = 7.5 * 0.5 \rightarrow \frac{2}{3}x = 3.75 - 2.5 \rightarrow x = 1.875 \, L.$$

www.assignmentexpert.com