

Answer on Question #83040 – Math – Algebra

Question

There are 1.8×10^{-13} red blood cells in the body. A blood cell has a lifespan of 120 days. What percentage (correct to 2 significant figures) of our red blood cells are formed/destroyed every day?

Solution

If we assume that the replacement of red blood cells in our body occurs evenly, then for 120 days all 100% of red blood cells are formed/destroyed.

Thus, $\frac{100\%}{120} = 0.83\%$ of their total amount are formed/destroyed every day.

Answer: 0.83% of red blood cells in the body are formed/destroyed every day.