Answer on the question #54462 – Chemistry – General chemistry

Question:

If the caffeine concentration in a particular brand of soda is 3.23 mg/oz, drinking how many cans of soda would be lethal? Assume 10.0 grams of caffeine is a lethal dose, and there are 12 oz in a can.

Answer:

The number of cans will be:

$$n = \frac{lethal\ dose}{m(can) \times c(soda)} = \frac{10.0}{12 \times 3.23 \times 10^{-3}} = 258\ cans$$