Name
Date
Math 214

**Lab 02**

Base Model – Assume the average citizen of Nowhere eats 1 largemouth bass per day

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Value** | **Units** |
| Half Life $\left(t^{\*}\right)$ |  |  |
| $$k$$ |  |  |
| $$τ$$ |  |  |
| $$b$$ |  |  |
|  |  |  |
| **Calculated Quantity** | **Value** | **Units** |
| $$x^{\*}$$ |  |  |
| Concentration at $x^{\*}$ |  |  |
| minn |  |  |

*Given the results reported above, is the average adult citizen of Nowhere likely to accumulate a lethal dose of methyl mercury by eating one fish a day? Explain.*

*Given the results reported above, is the average pregnant women in the town of Nowhere likely to have fetal methyl mercury poisoning by eating one fish a day? You may assume the average mass of a pregnant woman is 70 kg. Explain.*

*How many fish does an average adult in the town of Nowhere need to eat each day so that the accumulated amount of methyl mercury in the body eventually exceeds 30 mg/kg?*

*How often should a pregnant woman in the town of Nowhere consume largemouth bass?*

*Write 1-2 sentences giving your official recommendation to the citizens of Nowhere on eating largemouth bass. Your recommendation should take into account all the results from your analysis.*

*Insert the graph generated from your script file.*