

Mathematics 2200H – Mathematical Reasoning

TRENT UNIVERSITY, Fall 2019

Assignment #12

A Change of Pace: An Application of Abstract Mathematics

Due on Monday, 2 December.

Please read *A Contribution to the Mathematical Theory of Big Game Hunting*, by H. Pétard*, which appeared in *The American Mathematical Monthly*, Vol. 45, No. 7 (Aug. – Sep., 1938), pp. 446–447. It should be available in electronic form from the JSTOR archive via Bata Library. A slightly modified version of this article can also be found at:

http://komplexify.com/math/humor_pure/HuntingLions.html

1. Devise three new and original ways to (ab)use mathematics to capture a lion in the Sahara desert. [10]

Bonus. Pick any one of $\pi + e$, $\pi - e$, $\pi \cdot e$, and $\frac{\pi}{e}$ and determine, with a complete proof, whether it rational or irrational. [Success = 100% on the final mark in MATH 2200H]

* This is apparently a pseudonym of Ralph Boas.