Explain why in a “normal” twenty-eight year period, every day of the week appears equally often on the 13th of a month. This is a fairly data heavy problem, so the crux of this assignment is to decide what information is critical to include and what information is superfluous. Be sure to

(a) Set the context and parameters of the problem (including what normal means),

(b) State a theorem,

(c) Prove the theorem (including only the critical details that give the structure of the proof).

For extra karma points: Explain which day of the week appears most frequently on the 13th of a month.