Dynamical Systems MA3081

Exercise sheet 13

Exercise 1 (Invariant measures)**.** Show that the measure $\mu(dx) = \frac{1}{\pi\sqrt{x(1-x)}} dx$ is invariant under the logistic map $g\colon [0,1] \to [0,1]$, $x \mapsto 4x(1-x)$.

Exercise 2 (Invariant measures)**.** Prove Lemma 19.7 from the lecture notes.

We should have time to discuss questions regarding the lecture material. For issues involving technicalities, please send me an e-mail in advance so that I can prepare.