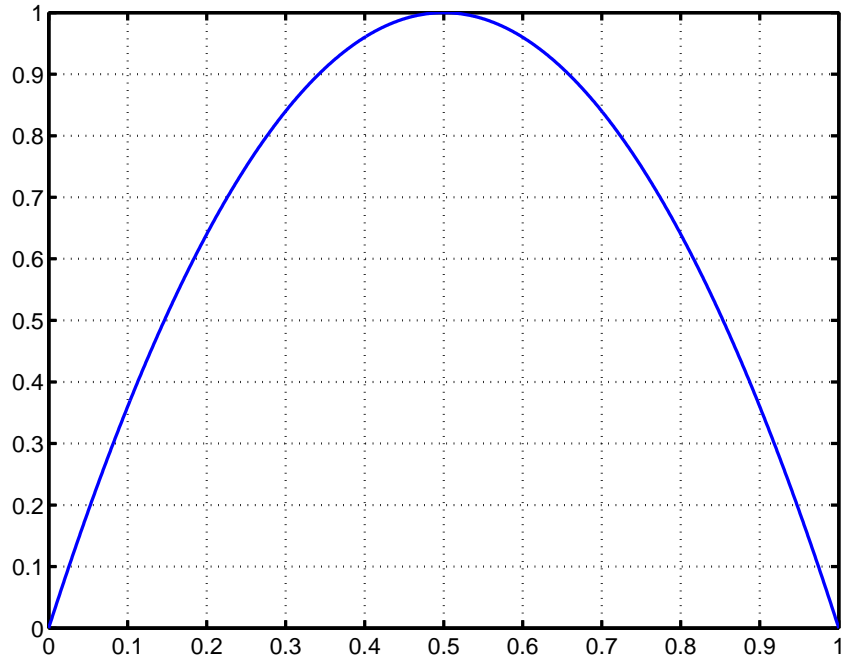


Worksheet #4: Itineraries

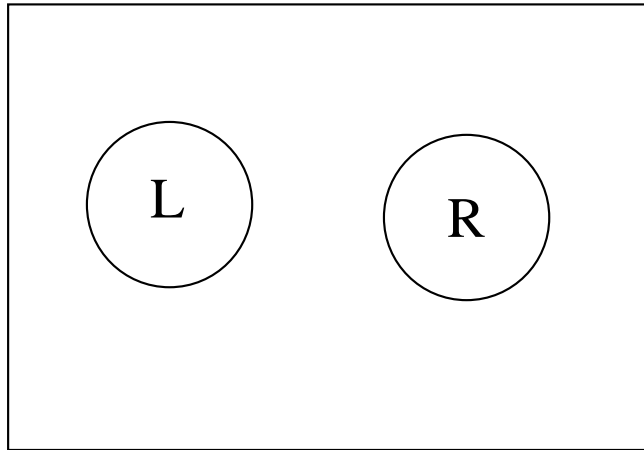
- (1) Label all the intervals in the 3-level itinerary of $G(x) = 4x(1 - x)$.



- (2) What do you predict the order for level 4 will be?

- (3) Can you write a general rule?

(4) Transition graphs.



- Draw an arrow from L to R. Is it possible to go from R to L? If so, draw it.
 - What does this imply about the sets $f(L)$ and R? (use \cup, \cap, \subset)
- Add all other possible arrows. (There should be 4 total.)
- (5) Consider x_0 in LRLRLRLR. Come up with a subinterval of LRLRLRLR but maps x_0 to $\geq \frac{1}{4}$.