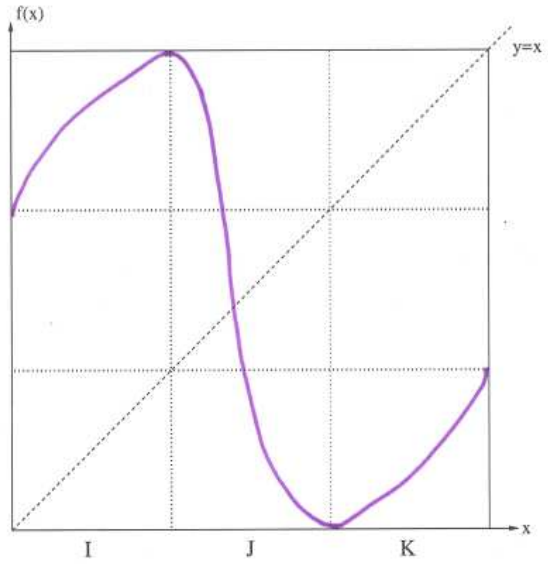
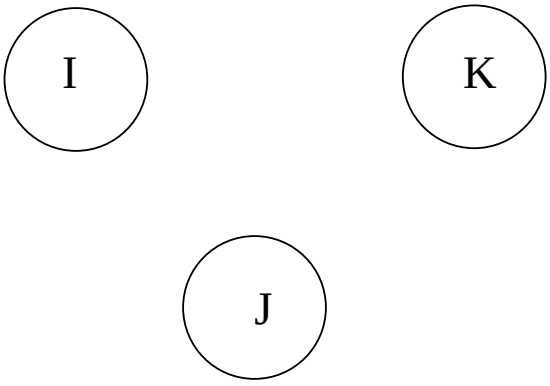
Worksheet #9: Transition graphs



(1) Draw the trasition plot of the graph above. Hint: Is $I \subset f(I)$? Is $K \subset f(I)$? etc.



(2) Prove there is a fixed point of f in J.

(3) Prove there is a fixed point of f^2 with $p_1 \in I$ and $p_2 \in K$.

(4) Catergorize *all* possible infinite sequences of symbols. For example, is $\overline{KI}$ legal? What if you start in J?

(5) Prove that periodic orbits of f have period 1 or 2 but no others.