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> #Hrudai Battini Attendance Quiz 9
> #1 Fixed point of  $x \rightarrow 3.6x(x-1)$ ;
f:= 3.6*x*(1-x)=3.6*x-3.6*x^2;
#x=3.6*x-3.6*x^2 -> x(2.6 -3.6x) = 0; x = 0, x= 2.6/3.6;
fs:= x*(2.6-3.6*x);
solve(fs);
#Stable Fixed point calculation:
#f'(x) = 3.6-7.2(x) -> |f'(2.6/3.6)| = 1.6 Unstable
#|f'(0)| = 3.6 Unstable.

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$$f := 3.6x(1-x) = -3.6x^2 + 3.6x$$

$$fs := x(2.6 - 3.6x)$$

$$0., 0.7222222222$$

(1)

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> #2 What other constant did Feigenbaum discover and what is its
significance?
#Feigenbaum's second constant is the alpha constant: a =
2.502907875095...
#Its significance is the ratio between the width of a tine and
the width of one of its two subtines.
#It can be used to model large dynamical systems such as drippign
faucets.

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