



$$(iv) x_1 = 3.5(0.5)(1-0.5) = 0.875$$

$$x_2 = 0.38213$$

$$x_3 = 0.8269$$

$$x_4 = 0.500898$$

$$x_5 = 0.875$$

$$x_6 = 0.38282$$

$$x_7 = 0.8269$$

$$x_8 = 0.50084$$

$$x_9 = 0.874997$$

$$x_{10} = 0.38282$$

Tends to 0.38, 0.87, 0.5

(3) Feigenbaum constant - universal constant for functions approaching chaos via doubling.