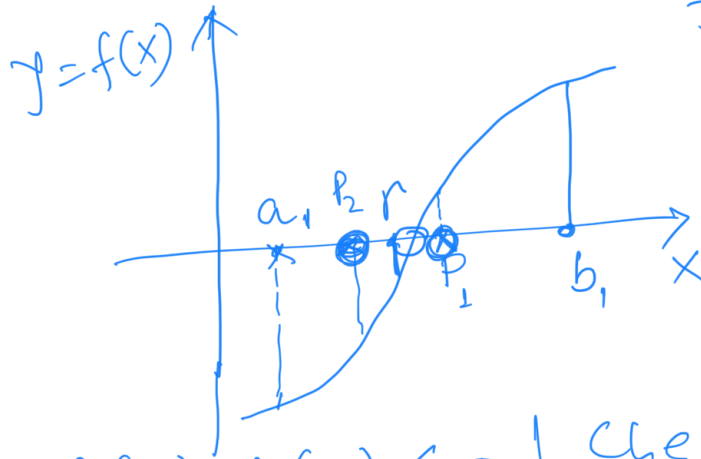


$$f(x) = 0$$

# 1) Bisection Method



$$f(x) = 0$$

$$\frac{f(a) f(b) < 0}{p_1 = \frac{a_1 + b_1}{2}}$$

$$\text{Check if } \frac{f(a) f(p) < 0}$$

$$a_2 = a_1$$

$$b_2 = p_1$$

$$p_2 = \frac{b_2 + a_2}{2}$$

$$\frac{f(a_2) f(p_2) < 0}{a_3 = p_2}$$

$$b_3 = b_2$$

$$\sim \frac{1}{2^n}$$