-> Calculation of greatest Common cleuser -> Euclido also -> Proof of time complexity for couled of Benet's fcomula

Golden rasion

PMI Modular asith melic Pooblem solvig

Jacatest Common diuser we also know the elementary maths way to calc god. of two rumbers m = Aprime factor of m3 Intersection of the n 1 Prime factors Store the prime no. Semente & Poine Sieur -> O (n 109 1092)

Endid's also = g cd (a,b) = Let's fick d'number a & b) a = bq +8 if a number k dundes a le kdeur bas well then it will dans and or well.

Po - remainder

a= bg +8 8 = a do b ged (a,b) -> this ged of a, b dende 6. mass ged (a, b) = ged (b, a-b) O is also deuseble 1:00 also deuseble

By 3001

gcd (a,b) = g(b, a-b) = gcd (b, adsb)

$$\chi^{2} - \chi - 1 = 0$$

$$\chi^{2} - \chi - 1 = 0$$

$$\chi^{2} = \chi + 1 = 0$$

$$\chi^{3} = \chi \times \chi^{2} = \chi(\chi + 1) = \chi^{2} + \chi \rightarrow \chi^{2} + \chi$$

$$\chi^{4} = \chi^{3} \times \chi = (2 + \chi) \times \chi = 2 + \chi^{2} + \chi$$

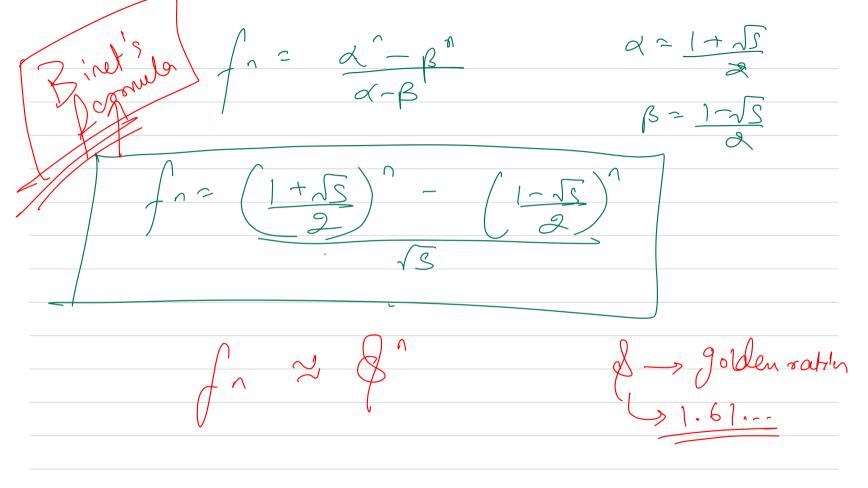
$$= 2 + \chi^{2} + \chi$$

$$= 2 + \chi^{2} + \chi$$

$$= 3 + \chi$$

$$\chi^{n} = \int_{a}^{a} d + \int_{a}^{b} d = \frac{1 + \sqrt{5}}{2}$$

$$\chi^{n} = \int_{a}^{a} d + \int_{a}^{b} d = \int_{a}^{b} d + \int_{a}^{b}$$



Cuded also -> [m] TC defends on the nord steps regund bredubo ged (a,b) — n eleks $Q \ge f_{n+2} \qquad b \ge f_{n+1}$ 9 cd (2,1) -> 1 step (Base Case 2 > fit2 > fit2 > fi 3 = f1+2 -> f1+2 -> f3

