

Base 2 Review

Log N means what do you raise 2 by in order to get N

$$2^2 = 4 \quad \log 4 = 2$$

$$2^3 = 8 \quad \log 8 = 3$$

$$2^4 = 16 \quad \log 16 = 4$$

$$2^5 = 32 \quad \log 32 = 5$$

$$2^6 = 64 \quad \log 64 = 6$$

$$2^{10} = 1024 \quad \log 1024 = 10$$

So what is $\log 128$??

What is $\log 256$??

Summation Review

$$\text{Sum of } I \text{ as } I \text{ varies from } 1 \text{ to } N = 1 + 2 + 3 + \dots + N = N(N+1)/2$$

$$\text{Sum of } I \text{ as } I \text{ varies from } 1 \text{ to } N-1 = 1 + 2 + 3 + \dots + N-1 = (N-1)N/2$$

Thus,

$$\text{Sum of } I \text{ as } I \text{ varies from } 1 \text{ to } 10 = 10 \cdot 11 / 2$$

$$\text{Sum of } I \text{ as it varies from } 0 \text{ to } 10 = \text{same as above}$$

$$\text{Sum of } I \text{ as it varies from } 1 \text{ to } 9 = 9 \cdot 10 / 2$$