We reduce the size of the input approximatelly by 2/3 each time
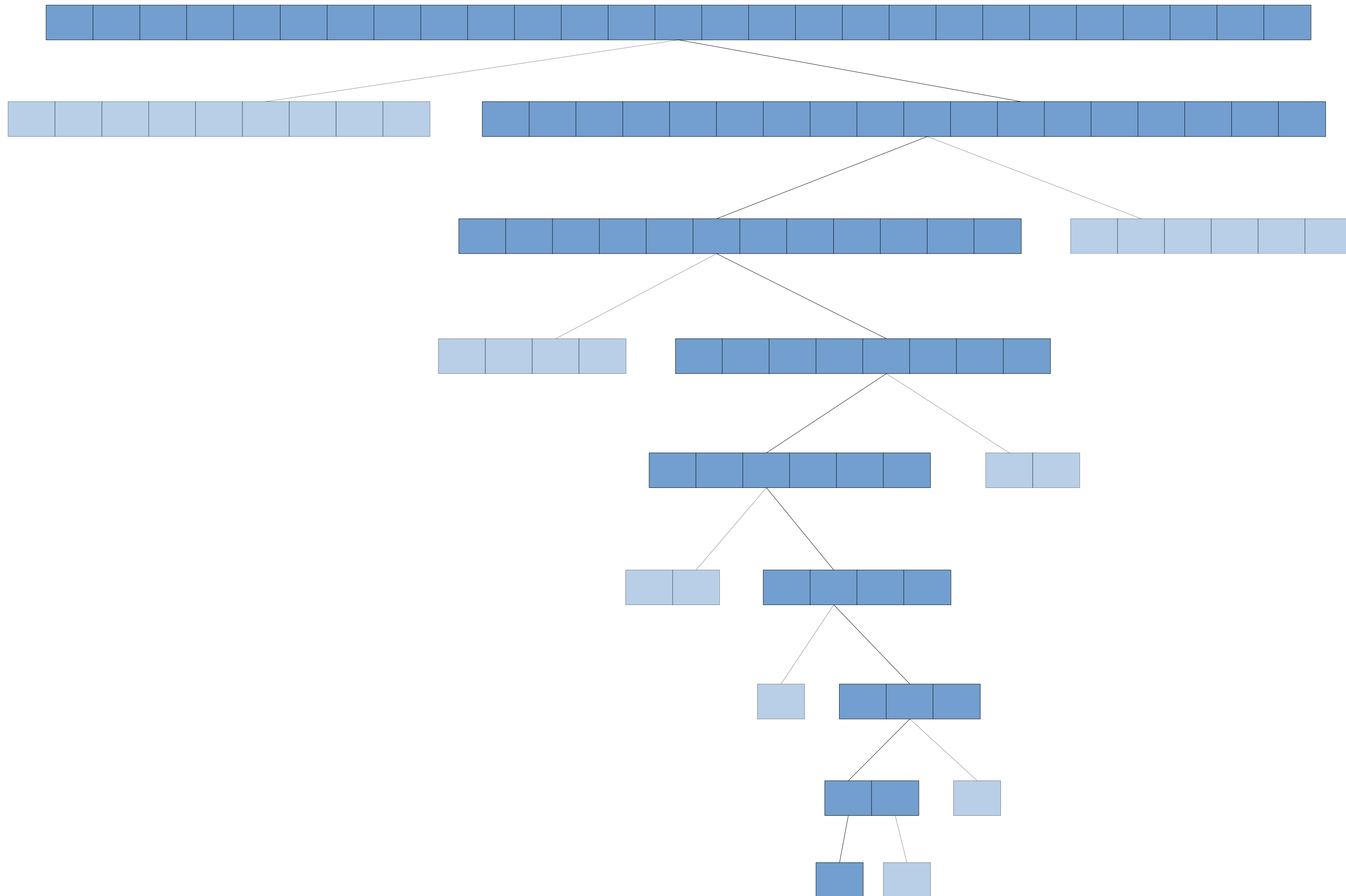

$$\log_{3/2}(N)$$

$$=$$

$$\frac{\log(N)}{\log(3/2)}$$