

Collatz Conjecture

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1 Conjecture 1:

In conjecture 1, the sequence 2^n will have $n + 1$ terms by the time it reaches 2^n . For example, 2 took 2 terms, 4 took 3 terms, 8 took 4 terms, and 16 took 5 terms.

2 Conjecture 2:

In conjecture 2, we saw that the powers of $2k+1$ converge once they reach 16 . For example, 4 starts to converge at 4, and 16 starts to converge at 16.

3 Conjecture 3:

In conjecture 3, looking at powers of 3, 5 and 6, we can see that there are twice as many even numbers than odd numbers. At least 60 percent of the terms were even and no more than 40 percent of the terms.