1. Fibonacci sequence

The Fibonacci sequence is defined through the recurrence relation $F_n = F_{n-1} + F_{n-2}$. It can also be expressed in *closed form:*

$$F_n = \left\lfloor \frac{1}{\sqrt{5}} \phi^n \right\rfloor, \quad \phi = \frac{1 + \sqrt{5}}{2}$$

The first 8 numbers of the sequence are:

F_1	F_2	F_3	F_4	F_5	F_6	F_7	F_8
1	1	2	3	5	8	13	21

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