

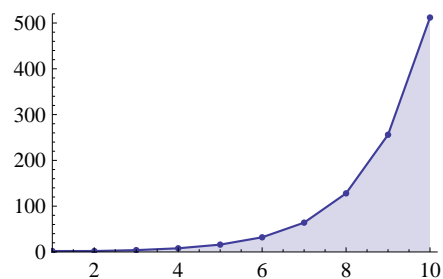
2,2,4,8,16,32,64,128,256,512...



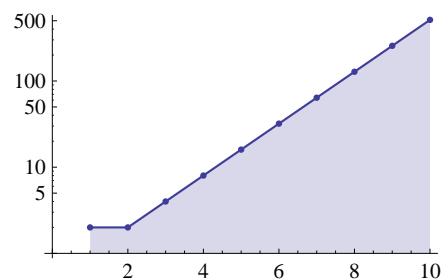
Input:

{2, 2, 4, 8, 16, 32, 64, 128, 256, 512}

Plot:



Log-linear plot:



Wolfram|Alpha: 2,2,4,8,16,32,64,128,256,512...

Possible closed form:

$$a_n = \frac{1}{20\,160} \left(n^8 - 36 n^7 + 602 n^6 - 5712 n^5 + 33\,929 n^4 - 125\,244 n^3 + 288\,028 n^2 - 352\,848 n + 201\,600 \right) \text{ (for all terms given)}$$

Possible continuation:

2, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1022, 2026, 3962, 7594, 14 198, ...

Possible generating function:

$$\mathcal{G}_n(a_n)(z) = \frac{2(z-1)}{2z-1}$$

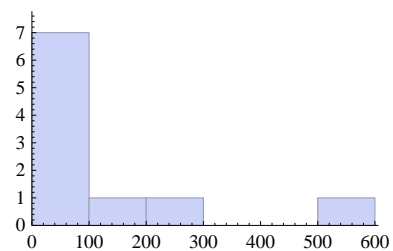
Length of data:

10 items

Total:

$$2 + 2 + 4 + 8 + 16 + 32 + 64 + 128 + 256 + 512 = 1024$$

Histogram:



Wolfram|Alpha: 2,2,4,8,16,32,64,128,256,512...

Statistics:

mean	102.4
median	24
standard deviation	164.9

Differences:

```
2  2  4  8  16  32  64  128  256  512
0  2  4  8  16  32  64  128  256
2  2  4  8  16  32  64  128
0  2  4  8  16  32  64
2  2  4  8  16  32
0  2  4  8  16
2  2  4  8
0  2  4
2  2
```

Successive ratios:

1, 2, 2, 2, 2, 2, 2, 2, 2

Diophantine relation:

$$2 + 2 + 4 + 8 + 16 + 32 + 64 + 128 + 256 = 512$$

Greatest common divisor:

$$(2, 2, 4, 8, 16, 32, 64, 128, 256, 512) = 2$$