

Calcul 1**Commande :**`a(n):=n^2`**Résultat :**`a(n):=n^2`**Calcul 2****Commande :**`a[n]:=n^2`**Résultat :**`a[n]:=n^2`**Calcul 3****Commande :**`a(n):= if n = 0 then 4 else 2*a(n-1)-3`**Résultat :**`a(n):=if n = 0 then 4 else 2*a(n-1)-3`**Calcul 4****Commande :**`a(110)`**Résultat :**`1298074214633706907132624082305027`**Calcul 5****Commande :**`a[n]:= if n = 0 then 4 else 2*a[n-1]-3`**Résultat :**`a[n]:=if n = 0 then 4 else 2*a[n-1]-3`**Calcul 6****Commande :**`a[110]`**Résultat :**`1298074214633706907132624082305027`

Calcul 7

Commande :

```
load("solve_rec")
```

Résultat :

```
/usr/local/share/maxima/5.49.0/share/solve_rec/solve_rec.mac
```

Calcul 8

Commande :

```
solve_rec(u[n]=2*u[n-1]-3, u[n])
```

Résultat :

$$u_n = 2^n k_1 - 3 \cdot 2^n + 3$$

Calcul 9

Commande :

```
solve_rec(u[n]=2*u[n-1]-3, u[n], u[0]=4)
```

Résultat :

$$u_n = 2^n + 3$$

Calcul 10

Commande :

```
define(v[n], rhs(%o9))
```

Résultat :

```
v[n]:=0
```

Calcul 11

Commande :

```
v[9]
```

Résultat :

```
0
```

Calcul 12

Commande :

```
entiers:makelist(n,n,0, 20)
```

Résultat :

```
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20]
```

Calcul 13

Commande :

```
termesdelasuite:map(a,entiers)
```

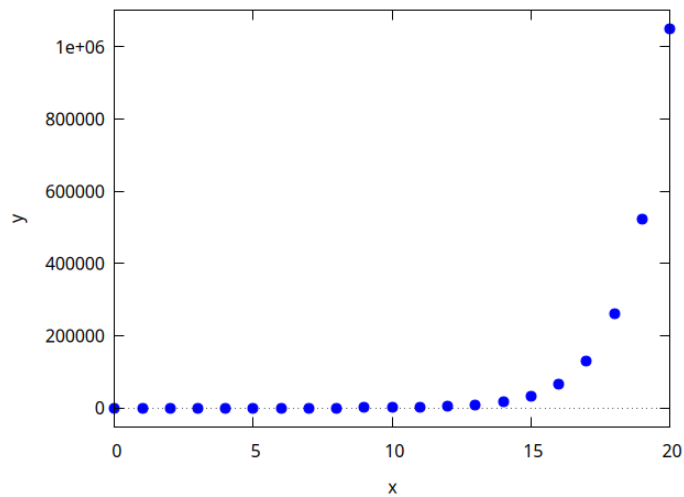
Résultat :

```
[4, 5, 7, 11, 19, 35, 67, 131, 259, 515,  
1027, 2051, 4099, 8195, 16387, 32771, 65539, 131075, 262147, 524291,  
1048579]
```

Calcul 14

Commande :

```
wxplot2d([discrete, entiers,termesdelasuite],[style, points])
```



Calcul 15

Commande :

```
r:1.23
```

Résultat :

```
1.23
```

Calcul 16

Commande :

```
a(n):= if n < 1 then 0 else a(n-1)+r
```

Résultat :

```
a(n):=if n < 1 then 0 else a(n-1)+r
```

Calcul 17

Commande :

```
a(110)
```

Résultat :

```
135.300000000000007
```

Calcul 18

Commande :

```
entiers:makelist(n,n,0, 20)
```

Résultat :

```
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20]
```

Calcul 19

Commande :

```
termesdelasuite:map(a,entiers)
```

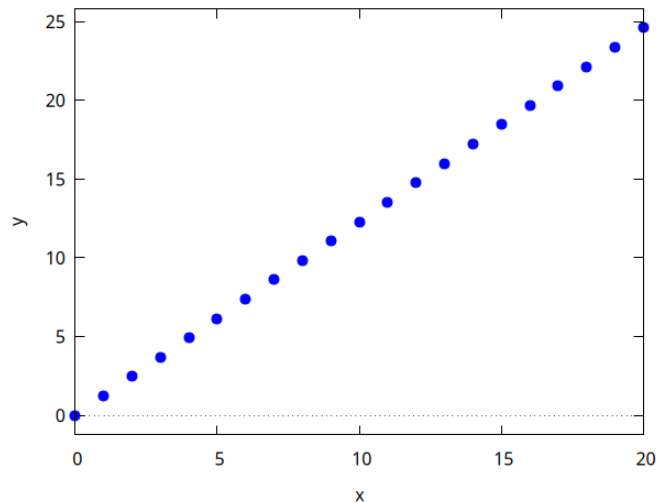
Résultat :

```
[0, 1.23, 2.46, 3.69, 4.92, 6.15, 7.380000000000001, 8.610000000000001, 9.840000000000002, 11.070000000000002, 12.300000000000002, 13.530000000000003, 14.760000000000003, 15.990000000000004, 17.220000000000002, 18.450000000000003, 19.680000000000003, 20.910000000000004]
```

Calcul 20

Commande :

```
wxplot2d([discrete, entiers,termesdelasuite],[style, points])
```



Calcul 21

Commande :

```
q:1.23
```

Résultat :

```
1.23
```

Calcul 22

Commande :

```
a(n):= if n < 1 then 2 else a(n-1)*q
```

Résultat :

```
a(n):=if n < 1 then 2 else a(n-1)*q
```

Calcul 23

Commande :

```
a(10)
```

Résultat :

```
15.85189219210378
```

Calcul 24

Commande :

```
entiers:makelist(n,n,0, 20)
```

Résultat :

```
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20]
```

Calcul 25

Commande :

```
termesdelasuite:map(a,entiers)
```

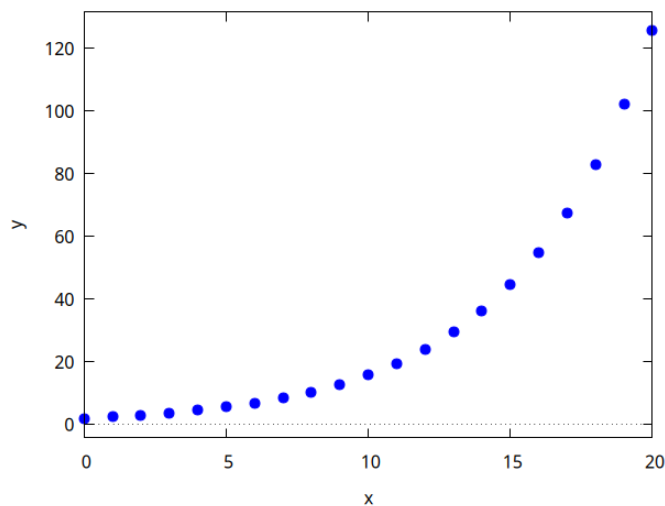
Résultat :

```
[2, 2.46, 3.0258, 3.7217339999999997, 4.57773282, 5.6306113685999994, 6.925651983377999, 8.51855193955494, 10.477818885652574, 12.85189219210378, 15.85189219210378, 19.497827396287647, 23.982327697433806, 29.49826306784358, 36.28286357344761, 44.62792219534055, 54.89234125.64124303504038]
```

Calcul 26

Commande :

```
wxplot2d([discrete, entiers,termesdelasuite],[style, points])
```



Calcul 27

Commande :

```
a(n):=n^2
```

Résultat :

```
a(n):=n^2
```

Calcul 28

Commande :

```
limit(a(n),n,inf)
```

Résultat :

∞

Calcul 29

Commande :

```
a(n):=1/n^2
```

Résultat :

```
a(n):=1/n^2
```

Calcul 30

Commande :

```
limit(a(n),n,inf)
```

Résultat :

0

Calcul 31

Commande :

```
sum(a(k), k, 1, 10)
```

Résultat :

$$\frac{1968329}{1270080}$$

Calcul 32

Commande :

```
load("functs")
```

Résultat :

```
/usr/local/share/maxima/5.49.0/share/simplification/functs.mac
```

Calcul 33

Commande :

`arithmetic(1,2,3)`

Résultat :

5

Calcul 34

Commande :

`geometric(1,2,3)`

Résultat :

4

Calcul 35

Commande :

`arithsum(1,2,3)`

Résultat :

9

Calcul 36

Commande :

`geosum(1,2,3)`

Résultat :

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