

PRGRS

Calculations with progressiones - Comercial Interest

Progressions - Interest

Info

Progressions

Arithmetic $an = a1 + (n-1) \cdot d$

a1 = 5 d = 5.2 n = 6 an = 31 Sn = 108

Interpolate 4 terms between 5 and 31 10.2

$an = a1 + d(n-1)$
 $Sn = \frac{(a1+an) \cdot n}{2}$

Geometric $an = a1 \cdot r^{(n-1)}$

a1 = 12 r = 0.5 n = 8 an = 0.093 Sn = 24

falling S = 24

Interpolate 6 terms between 7 and 67 9.665

$an = a1 \cdot d^{n-1}$
 $Sn = \frac{an \cdot r - a1}{r-1}$

Interest

Simple interest

c = 10000 r = 3 % t = 5 C = 11500

$C = c(1+r/100)$

Compound interest

c = 10000 r = 3 % t = 5 C = 11592.74

$C = c(1+r/100)^t$

Annuities of...

capitalization $i = r/100$

C = 10000 r = 3 % t = 5 a = 1828.685

$a = \frac{C \cdot i}{(1+i)((1+i)^t - 1)}$

paying-off

D = 10000 r = 3 % t = 5 a = 2183.545

$a = \frac{D \cdot i \cdot (1+i)^t}{(1+i)^t - 1}$

In all the cases it is necessary to introduce 3 data and after pressing **Ok** the rest of parameters will be calculated.

Any of the parameters can be a data, except the **Sn** of the geometric pr., since it implies a non standard equation. Likewise, any parameter can be a unknown, except for **n** and **t**, since they can be only integer values.

If there are more than 3 values in the stalls of a case they will be interpreted as data the 3 to the left, and the other ones will become results.

If you want to invalidate a stall like data you must to put it in white.