

ARITHMETIC

(add)

- recursive definition

$$a_n = a_{n-1} + d$$

- explicit formula

$$a_n = a_1 + (n-1)d$$

- sum of finite series

$$S_n = \frac{n}{2}(a_1 + a_n)$$

GEOMETRIC

(multiply)

- recursive definition

$$a_n = a_{n-1} \cdot r$$

- explicit formula

$$a_n = a_1 \cdot r^{n-1}$$

- sum of finite series

$$S_n = \frac{a_1(1-r^n)}{1-r}$$

- sum of infinite series

$$S = \frac{a_1}{1-r}, |r| < 1$$

Summation Notation

ending value of n

n =

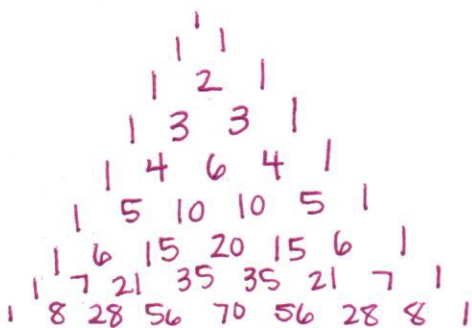
$$\sum$$

explicit formula

n =

starting value of n.

PASCAL'S Δ



Geometric series

