G.1 Summen av endelige rekker

(G.1.1)
$$\sum_{k=1}^{n} 1 = n$$

(G.1.2)
$$\sum_{k=1}^{n} k = \frac{n(n+1)}{2}$$

(G.1.3)
$$\sum_{k=1}^{n} k(k-1) = \frac{n(n^2-1)}{3}$$

(G.1.4)
$$\sum_{k=1}^{n} k^2 = \frac{n(n+1)(2n+1)}{6}$$

(G.1.5)
$$\sum_{k=1}^{n} k(n-k) = \frac{n(n^2-1)}{6}$$

(G.1.6)
$$\sum_{k=0}^{n} x^k = \frac{x^{n+1}-1}{x-1}$$

(G.1.7)
$$\sum_{k=0}^{n} 2^k = 2^{n+1}-1$$

(G.1.8)
$$\sum_{k=1}^{n} k\,x^k = \frac{nx^{n+2}-(n+1)x^{n+1}+x}{(x-1)^2}$$

(G.1.9)
$$\sum_{k=1}^{n} k2^k = (n-1)2^{n+1}+2$$

(G.1.10)
$$\sum_{k=1}^{n} \frac{k}{2^k} = 2 - \frac{n+2}{2^n}$$

(G.1.11)
$$\sum_{k=0}^{n} (k+1)2^k = n2^{n+1}+1$$

(G.1.12)
$$\sum_{k=0}^{n} (2k+1)2^k = (2n-1)2^{n+1}+3$$

(G.1.13)
$$\sum_{k=1}^{n} \frac{1}{k(k+1)} = \frac{n}{n+1}$$