

1 du

1.1

$$(a_n) = (1, -1, 2, -1, 3, -3, \dots)$$

$$\frac{1}{(1-x)^4}$$

$$(b_n) = (1, -3, 5, -7, 9, -11, \dots)$$

$$\sum_{n \geq 0} (2n+1)x^n$$

$$(c_n) = (1, 4, 9, 16, 25, 36, \dots)$$

$$\sum_{n \geq 0} n^2 x^n$$

1.2

$$\begin{aligned} [x^5] : (2x-1)^{-2} \\ [x^5] : (1+x)^{-1/3} \end{aligned}$$

1.3