

$$\begin{aligned} (\dots a_3 a_2 a_1 a_0 \cdot a_{-1} a_{-2} \dots)_b &= \\ \dots + a_3 b^3 + a_2 b^2 + a_1 b^1 + a_0 + a_{-1} b^{-1} + a_{-2} b^{-2} + \dots & \quad (1) \end{aligned}$$