$$2\,\Theta\left(u - \tfrac{1}{2}\right) - 2\,\Theta\left(u + \tfrac{1}{2}\right) - 2$$

|  | $(\gamma_{-3}$ | $\gamma_7$ | $\gamma_9$ | $\gamma_8$ | $\gamma_{-1}$ | $\gamma_{-2})$ |
|---|---|---|---|---|---|---|
| $\overline{\gamma}_{-3}$ | $\dfrac{2u^2\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ | $-\dfrac{2u}{(2u-1)\,(2u+1)}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ |
| $\overline{\gamma}_{7}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $\dfrac{2\left(2u^2-1\right)}{(2u-1)\,(2u+1)}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ | $-\dfrac{2u}{(2u-1)\,(2u+1)}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ |
| $\overline{\gamma}_{9}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $\dfrac{2u^2\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ | $-\dfrac{2u}{(2u-1)\,(2u+1)}$ |
| $\overline{\gamma}_{8}$ | $-\dfrac{2u}{(2u-1)\,(2u+1)}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $\dfrac{2u^2\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ |
| $\overline{\gamma}_{-1}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ | $-\dfrac{2u}{(2u-1)\,(2u+1)}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $\dfrac{2\left(2u^2-1\right)}{(2u-1)\,(2u+1)}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ |
| $\overline{\gamma}_{-2}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ | $-\dfrac{2u}{(2u-1)\,(2u+1)}$ | $-\dfrac{1}{(2u-1)\,(2u+1)}$ | $\dfrac{u\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ | $\dfrac{2u^2\left(4u^2-3\right)}{(2u-1)\,(2u+1)}$ |