

$$f(x) = \frac{a_1}{a_2} x^2 + \frac{b_1}{b_2} x \quad (+c)$$

1. Fall $b_1 = 0$: $\frac{a_2}{4} \in \mathbb{Z} \Rightarrow \text{Periode} = \frac{a_2}{2}$

$\frac{a_2}{4} \notin \mathbb{Z} \Rightarrow \text{Periode} = a_2$

2. Fall $b_1 \neq 0$:

Fallname	$\frac{a_2}{2} \in \mathbb{Z}$	$\frac{a_2}{4} \in \mathbb{Z}$	$\frac{b_2}{2} \in \mathbb{Z}$	$\frac{b_2}{4} \in \mathbb{Z}$	Periode
a	x				$\frac{a_2 \cdot b_2}{\text{ggT}(a_2, b_2)}$
b	✓	✓			$\frac{a_2 \cdot b_2}{2 \cdot \text{ggT}(\frac{a_2}{2}, b_2)}$
c	✓	x	x		$\frac{a_2 \cdot b_2}{\text{ggT}(a_2, b_2)}$
d	✓	x	✓	✓	$\frac{a_2 \cdot b_2}{\text{ggT}(a_2, b_2)}$
e	✓	x	✓	x	$\frac{a_2 \cdot b_2}{2 \cdot \text{ggT}(a_2, b_2)}$