

Gegeben: $0,0101_2 \Rightarrow b=2$

	1	1	0	1	0	
· 2	+0	+0,5	+0,75	+0,375	+0,6875	<u><u>0,34375</u></u>
	1	1,5	0,75	1,375	0,6875	

Diagram illustrating the conversion of the binary number $0,0101_2$ to decimal using the method of multiplying by the base $b=2$.

The digits (Ziffern) are 1, 1, 0, 1, 0.

The intermediate results (Zwischenergebnisse) are calculated by multiplying the digits by powers of 2:

- $1 \cdot 2^0 = 1$
- $1 \cdot 2^{-1} = 0,5$
- $0 \cdot 2^{-2} = 0$
- $1 \cdot 2^{-3} = 0,125$
- $0 \cdot 2^{-4} = 0$

The final result is the sum of these intermediate results: $1 + 0,5 + 0 + 0,125 + 0 = 1,625$.

Labels in the diagram:

- Ziffern (Digits)
- dividiert durch $b=2$ (divided by $b=2$)
- Zwischenergebnisse (Intermediate results)