

$$1. (16)_{10} \rightarrow ()_2 = \begin{array}{r} 2 | 16 \\ 2 | 8 \rightarrow 0 \\ 2 | 4 \rightarrow 0 \\ 2 | 2 \rightarrow 0 \\ 1 \rightarrow 1 \end{array}$$

$\boxed{(10000)_2}$

$$2. (13)_8 \rightarrow ()_2 = \boxed{(001011)_2}$$

$$3. (-24.625)_{10} = (?)_2$$

~~4.~~

$$\begin{array}{r} 2 | 24 \\ 2 | 12 \rightarrow 0 \\ 2 | 6 \rightarrow 0 \\ 2 | 3 \rightarrow 0 \\ 1 \rightarrow 1 \end{array}$$

$\circlearrowleft (11000.101)_2$

(9) $(AB, IC)_{16} = (10101011.00011100)_2$

\circlearrowleft