



$$\frac{2^{10}}{2} = \underline{1024}$$

000 | 0101 . 1100 \rightarrow 15.C

ABC.D \rightarrow 1010 1011 1100 . 1101

3A.B₁₄ \rightarrow (44.96)₍₁₂₎

$$3 \times 14^1 + 10 \times 14^0 + 11 \times 14^{-1}$$

$$= 52.79_{(10)}$$

$$\begin{array}{r} 12 \overline{) 52} \\ 12 \overline{) 4} \quad 4 \\ \hline 0 \quad \cancel{4} \uparrow \end{array}$$

$$\begin{array}{r} \frac{1}{12} \overline{) 0.79} \\ \frac{1}{12} \overline{) 0.48} \quad 9 \\ \frac{1}{12} \overline{) 0.576} \quad 5 \\ \hline 0.12 \quad 9 \downarrow \end{array}$$

①

Binary Arithmetic

$$\begin{array}{r} + \quad \begin{array}{cccc} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ \hline 10 & 1 & 1 & 10 \end{array} \end{array}$$

$$\begin{array}{r} + \quad \begin{array}{cccc} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ \hline 11 & 1 & 1 & 00 \end{array} \end{array}$$

101

(2)

$$\begin{array}{r}
 \overset{\cdot}{1} \ \overset{\cdot}{1} \ \overset{\cdot}{1} \ 0 \ 1 \\
 - \quad \quad 1 \ 1 \ 1 \ 1 \\
 \hline
 0 \ 1 \ 1 \ 1 \ 0
 \end{array}$$

$$\begin{array}{r}
 \overset{\cdot}{1} \ \overset{\cdot}{0} \ \overset{\cdot}{0} \ 0 \ 1 \\
 - \quad 0 \ 0 \ 1 \ 1 \ 1 \\
 \hline
 0 \ 1 \ 0 \ 1 \ 0
 \end{array}$$

$$\overset{\cdot}{1} \ 2 \ 5$$

$$\begin{array}{r}
 \quad \quad 5+10 \\
 \hline
 \cancel{1} \ 0
 \end{array}$$

$$\begin{array}{r}
 0 \ 2 \ 5 \ + \\
 \uparrow \\
 10
 \end{array}$$

$$12 \times 10 + 5 \times 1$$

③

$$101 \overline{) 11101}$$

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