

MACMO (A)

$$① (120201)_3 = (2)_{10} = 1 \cdot 3^4 + 2 \cdot 3^3 + 0 \cdot 3^2 + 2 \cdot 3^1 + 0 \cdot 3^0 = 81 + 54 + 0 + 6 + 0 = 141$$

$$② (1814)_{10} = (2)_7 = 10$$

$$(1814)_{10} = (10404)_2$$

$$\begin{array}{r} 1814 : 7 = 259 \text{ res } 4 \checkmark \\ 259 : 7 = 37 \text{ res } 6 \checkmark \\ 37 : 7 = 5 \text{ res } 2 \checkmark \\ 5 : 7 = 0 \text{ res } 5 \checkmark \end{array}$$

3k (±5)

$$123_4 + 212_4 = 1007$$

$$\begin{array}{r} 123 \\ + 212 \\ \hline 111 \checkmark \\ 1001 \checkmark \end{array}$$

3k (±3)

$$11101_2 \cdot 101_2 = 10010001$$

$$\begin{array}{r} 11101 \\ \cdot 101 \\ \hline 11101 \\ 00000 \\ \hline 11101 \\ \hline 11101 \\ \hline 10010001 \end{array}$$

4k (±4)

$$\begin{array}{r} 12^4 + 12^3 + 12^2 + 02^1 + 12^0 \\ 16 \quad 8 \quad 4 \quad 0 \quad 1 \\ \hline 29 \\ * 5 \\ \hline 145 \checkmark \end{array}$$

$$101 = 12^2 + 02^1 + 12^0 = 16 + 0 + 1 = 17$$

A) 2794 = MMDCCLXXIV 2k (±2)

B) 896 = DCCCXCVI 2k (±2)

C) MMMLXIX = 3569 2k (±2)

D) MCDI = 1401 2k (±2)

≤ 22k (1) A

$$302 = 302 \cdot 31 = 9362$$

302

31

9362

1310