

基礎理論 練習問題 No.01	クラス	番号	氏名
			解答

問1.2進数の加算について、下記の(1)～(30)問題について答えなさい。

(1)	(2)	(3)	(4)	(5)
1	10	10	100	101
+ 1	+ 1	+ 10	+ 1	+ 1
<u>10</u>	<u>11</u>	<u>100</u>	<u>101</u>	<u>110</u>

(6)	(7)	(8)	(9)	(10)
101	110	1010	1110	10101
+ 100	+ 11	+ 101	+ 11	+ 10
<u>1001</u>	<u>1001</u>	<u>1111</u>	<u>10001</u>	<u>10111</u>

(11)	(12)	(13)	(14)	(15)
10100	10111	11111	10011	1111
+ 111	+ 11	+ 1	+ 1010	+ 1010
<u>11011</u>	<u>11010</u>	<u>100000</u>	<u>11101</u>	<u>11001</u>

(16)	(17)	(18)	(19)	(20)
1001	1101	10101	11011	10011
+ 1101	+ 1101	+ 1010	+ 11111	+ 10111
<u>10110</u>	<u>11010</u>	<u>11111</u>	<u>111010</u>	<u>101010</u>

(21)	(22)	(23)	(24)	(25)
111101	100011	100010	1011111	1011010
+ 10101	+ 110000	+ 101111	+ 1110	+ 101011
<u>1010010</u>	<u>1010011</u>	<u>1010001</u>	<u>1101101</u>	<u>10000101</u>

(26)	(27)	(28)	(29)	(30)
1011111	1110101	1001101	1010111	1011110
+ 110111	+ 1101111	+ 1010110	+ 1011110	+ 1011011
<u>10010110</u>	<u>11100100</u>	<u>10100011</u>	<u>10110101</u>	<u>10111001</u>

問2. 2進数の減算について、下記の(1)～(30)問題について答えなさい。

(1)

$$\begin{array}{r} 10 \\ - 1 \\ \hline 1 \end{array}$$

(2)

$$\begin{array}{r} 11 \\ - 1 \\ \hline 10 \end{array}$$

(3)

$$\begin{array}{r} 100 \\ - 11 \\ \hline 1 \end{array}$$

(4)

$$\begin{array}{r} 111 \\ - 100 \\ \hline 11 \end{array}$$

(5)

$$\begin{array}{r} 111 \\ - 101 \\ \hline 10 \end{array}$$

(6)

$$\begin{array}{r} 110 \\ - 1 \\ \hline 101 \end{array}$$

(7)

$$\begin{array}{r} 1110 \\ - 1010 \\ \hline 100 \end{array}$$

(8)

$$\begin{array}{r} 10100 \\ - 1011 \\ \hline 1001 \end{array}$$

(9)

$$\begin{array}{r} 10001 \\ - 1110 \\ \hline 11 \end{array}$$

(10)

$$\begin{array}{r} 10010 \\ - 11 \\ \hline 1111 \end{array}$$

(11)

$$\begin{array}{r} 101010 \\ - 1011 \\ \hline 11111 \end{array}$$

(12)

$$\begin{array}{r} 101011 \\ - 1110 \\ \hline 11101 \end{array}$$

(13)

$$\begin{array}{r} 101110 \\ - 100110 \\ \hline 1000 \end{array}$$

(14)

$$\begin{array}{r} 100110 \\ - 1101 \\ \hline 11001 \end{array}$$

(15)

$$\begin{array}{r} 100100 \\ - 10111 \\ \hline 1101 \end{array}$$

(16)

$$\begin{array}{r} 101110 \\ - 11110 \\ \hline 10000 \end{array}$$

(17)

$$\begin{array}{r} 111011 \\ - 10100 \\ \hline 100111 \end{array}$$

(18)

$$\begin{array}{r} 101110 \\ - 101001 \\ \hline 101 \end{array}$$

(19)

$$\begin{array}{r} 1001111 \\ - 10111 \\ \hline 111000 \end{array}$$

(20)

$$\begin{array}{r} 1011111 \\ - 11111 \\ \hline 1000000 \end{array}$$

(21)

$$\begin{array}{r} 10110110 \\ - 1101 \\ \hline 10101001 \end{array}$$

(22)

$$\begin{array}{r} 10110001 \\ - 100110 \\ \hline 10001011 \end{array}$$

(23)

$$\begin{array}{r} 10110111 \\ - 10110010 \\ \hline 101 \end{array}$$

(24)

$$\begin{array}{r} 10010101 \\ - 101010 \\ \hline 1101011 \end{array}$$

(25)

$$\begin{array}{r} 10100101 \\ - 1011111 \\ \hline 1000110 \end{array}$$

(26)

$$\begin{array}{r} 11100111 \\ - 10110110 \\ \hline 110001 \end{array}$$

(27)

$$\begin{array}{r} 11010111 \\ - 1011011 \\ \hline 1111100 \end{array}$$

(28)

$$\begin{array}{r} 10110001 \\ - 110001 \\ \hline 10000000 \end{array}$$

(29)

$$\begin{array}{r} 10101101 \\ - 111011 \\ \hline 1110010 \end{array}$$

(30)

$$\begin{array}{r} 11010111 \\ - 10010101 \\ \hline 1000010 \end{array}$$