① 1024 — 10

③ a) $(1101.001)_{10} = (\overset{10\,9\,8\,7\,6\,5\,4\,3\,2\,1\,0\,-1\,-2\,-3}{1000\,1100\,11\,1101.000\,000\,000\,0100}\,^{-10\,-11\,-12})$

64 — 6

0.001 × 2 = 0.002 → A-1 = 0
0.002 × 2 = 0.004 → A-2 = 0
0.004 × 2 = 0.008 → A-3 = 0
0.008 × 2 = 0.016 → A-4 = 0
0.016 × 2 = 0.032 → A-5 = 0
0.032 × 2 = 0.064 → A-6 = 0

0.064 × 2 = 0.128 → A-7 = 0    688
0.128 × 2 = 0.256 → A-8 = 0    8 — 3
0.256 × 2 = 0.512 → A-9 = 0    1096
0.512 × 2 = 1.024 → A-10 = 1   4 — 2
0.024 × 2 = 0.048 = A-11 = 0   1100
0.048 × 2 = 0.096 = A-12 = 0   1 — 0
                               (1101)

$= (101031.00001\ldots)_4$

b) $(756754.016785)_9 = (211220211211.000120212212)_3$

c) 777779 ⌐7



$= (303430)_7$

d) $(66735072.0057)_8 =$
$(110\,110\,111\,011\,101\,000\,111\,010.000\,000\,101\,111)_2 =$
$(312323223032.002233)_4 = (DBBA3A.02F)_{16}$

e) $(3302322601.032123013)_4 = (3CBA1.39B1C)_{16} =$
$= (0011\,1100\,1011\,1010\,0001.0011\,1001\,1011\,0001\,11)_2 =$

④ a) FEB5DAA.EC75D₁₆

$$\text{FEB5DAA.EC75D}_{16}$$
$$+ \quad \text{EDD8EAD.DD9FC}_{16}$$
$$\overline{(\text{1OD9368C8.CA159})_{16}}$$

b) $(737720456.776654)_8$
$$+ \quad 67065737.577607 \ _8$$
$$\overline{(102700646.576463)_8}$$

c) $1001010.00D_{16}$
$$- \quad \text{FFDC9A.E90F}_{16}$$
$$\overline{(003375.17C1)_{16}}$$

d) $111101101001.11001_2$
$$+ \quad 11101101111.0101_2$$
$$\overline{(1011001001001.00011)_2} = (13111.06)_8$$

e) $1000111011.1001_2$
$$- \quad 11101101.011111_2$$
$$\overline{(001011110.000101)_2} = (5E.14)_{16}$$

⑤ $x = -(5F)_{16} = -(95)_{10} = -(0101\ 1111)_2$  ③

$y = +(20)_{16} = +(32)_{10} = +(0010\ 0000)_2$

a) $x + y \rightarrow 1010\ 0001$ (x em compl à 2)

$+\ 0010\ 0000$

$(1100\ 0001) = -(0011\ 1111)_2 = -(63)_{10}$

$= -(3F)_{16}$

b) $x - y \rightarrow 1010\ 0001$

$+\ 1110\ 0000$ (y em compl à 2)

$1\ 1000\ 0001 = -(0111\ 1111) = -(127)_{10}$

$= -(7F)_{16}$

c) $y - x \rightarrow 0010\ 0000_2$ (y)

$+\ 0101\ 1111$ (--x) "DESCOMPLEMENTA" x

$(0111\ 1111) = +(127)_{10} = +(7F)_{16}$