GABARITO   API – 2017/1°   ①

$9 - 512$
$8 - 256$
$6 - 64$
$5 - 32$
$- 11$
———
875

② a) $(1101101011.0101)_2 = (875 + 0,25 + 0,0625)$

$= (875,3125)_{10} = (1553.24)_8$

b) $(120122020102,1211.0121002021)_3 =$

$= (165821254.170723)_9$

c) 77777_8 |7 $= (164350)_7$

$\begin{array}{ll} & 11111\,|7 \\ & 21\quad 1234\,|7 \\ & 31\quad 33\quad 137\,|7 \\ & 41\quad 64\quad 47\ 15\,|7 \\ & 5\quad 3\quad 4\ 6\ 1 \end{array}$

d) $(676750.41055)_8 = (37DE8.845A)_{16} =$

$= 11011111101111001000.100001000101101_2 =$

$= (31331320.20101122)_4$

e) $(AEC1F.91E)_{16} = (223230133.210132)_4 =$

$= (10101110110000011111.100100011110)_2 =$

$= (2566037.4436)_8$

③ a)
$$
\begin{array}{r}
\text{FCBDA8C.3F9B}_{16} \\
+ \text{EECD7A5.DFEB}_{16} \\
\hline
(\text{1EB8B232.1F86})_{16}
\end{array}
$$

b)
$$
\begin{array}{r}
80191310.0231_{\,9} \\
-\ 78657345.72457_{\,9} \\
\hline
(00332853.18742)_{9}
\end{array}
$$

c)
$$
\begin{array}{r}
1011100.001_{16} \\
-\ \text{CDB4BE.8CCE}_{16} \\
\hline
(335C41.7342)_{16}
\end{array}
$$

d)
$$
\begin{array}{r}
11110101001.1011 \\
10111.11011100111 \\
+\ 10110.101110101101.01101 \\
\hline
(10100100011.00000)_{16}
\end{array}
$$

e)
$$
\begin{array}{r}
100011100100.0101_{2} \\
-\ 111011101.11101_{2} \\
\hline
(10110.11010110100)_{2}
\end{array}
$$