$$512$$
$$256$$
$$128$$
$$\underline{15}$$
$$911$$

2)a) $(111000111{,}011)_2 = (911.375)_{10} = (38F.6)_{16}$

$0{,}011_2 = 0.25 + 0.125 = 0.375_{10}$

b) $(222111000.01122)_3 = (28430.156)_9$

c) $66666,\underline{|6}$ $\qquad\qquad = (2304400)_6$

$0\quad 21\qquad\quad \underline{12346|6}$
$31\qquad\quad 33\qquad \underline{1405|6}$
$41\qquad\quad 046\qquad 50\quad \underline{156|6}$
$51\qquad\qquad 4\qquad 55\quad \underline{06\;21|6}$
$0\qquad\qquad\qquad\qquad 4\quad \underline{0\;3\;2|6}$
$ 2\;\;0$

d) $(23456.65432)_8 =$

$101110010101110,11010110001010$
$= (9130232.311203)_4 = (272E.D634)_{16}$

e) $(ABCDE.FEDC)_{16} = (2223303132.3332313)_4$

$= 1010101111100110111110,1111111101101011 =$

$= (2536336.77556)_8$

3)a) $\begin{array}{r} EFOEDCB.FB09_{16} \\ +\ FF9D09A.CEF9A_{16} \\ \hline (1EEABE66.CA02A)_{16} \end{array}$

b) $\begin{array}{r} 60001005.0101_7 \\ -\ 56560461.66503_7 \\ \hline (00110213.01204)_7 \end{array}$

c) $9010101.0B1_{16}$

   $- \; FCDCBA.EE9A$

   $\overline{(8042446.1C76)_{16}}$

d) 101101000011.1011_2

   110110111.10101_2

$+ \; 10110111110.01111$

   $\overline{(10010011001.1101)_2}$

e) 10100010001.01011_2

   $- \; 111110110.1100_2$

   $\overline{(10011010.10001)_2}$