192.75_{10}

$128\ 64\ 32\ 16\quad 8\ 4\ 2\ 1$

$1100\ 0000.11_2$

```
   ⎧(96)
   │2⟌192   r0
   │  -18
   │   12
   ⎩
   ⎧(48)
   │2⟌96    r0
   │  -8
   │  16
   ⎩
   ⎧(24)
   │2⟌48    r0
   ⎩
   ⎧(12)
   │2⟌24    r0
   ⎩
   ⎧(6)
   │2⟌12    r0
   ⎩
   ⎧(3)
   │2⟌6     r0
   ⎩
   ⎧(1)
   │2⟌3     r1
   │   2
   │   1
   ⎩
       1     r1
```

$\boxed{\begin{array}{c}128\\64\\\hline192\end{array}}$

$.75$

$\underline{\quad\ \ 2}$

$\boxed{1}.5\ 0$

$\underline{\quad\quad 2}$

$\boxed{1}.00$

$\begin{array}{r}0.5\\0.25\\\hline 0.75\end{array}$

$FE.DB_{16}$

$\underline{0111}\ \underline{1110}.\underline{1101}\ \underline{1011}0_2$

$3\quad 7\quad 6\ .\ 6\quad 6\quad 6_8$

$\underline{011\ 00\ 0000.110}$

$3\quad 0\quad 0\ .\ 6_8$

$\underline{1100\ 0000.1100}$

$C\quad 0\ .\ C_{16}$

$\boxed{\begin{array}{l}192.75_{10}\\1100000.11_2\\300.6_8\\C0.C_{16}\end{array}}$

$128\ 64\ 32\ 16\quad 8\ 4\ 2\ 1$

$1110.1101\quad 1010$

```
     1111
  13
    124  -4
    64   -10
    32
    16   10
    8    10
    4    10
     2
  ─────
  254 . 857142857142
```

.5	0	0	0	0	0	0	0		
.25	0	0	0	0	0	0	0		
.0625	0	0	0	0					
.03125	0	0	0						
.0078125	0	0							

$.85496875\ 0$

254.857142_{10}

$\boxed{\begin{array}{l}254.857142_{10}\\1111\ 1110.110\ 110\ 110\ 110_2\\376.666_8\\FE.DB_{16}\end{array}}$

BG1

76.54_8

$0111\ 110\ .\ 101\ 100^{00}_2$

$3\quad E\ .\ B\quad 0_{16}$

$3 \cdot 16^1 + E \cdot 16^0 + B \cdot 16^{-1}$

$48 + E + B \cdot (0.0625)$

$48 + 14 + 11(0.0625)$

$\begin{array}{r} .6250 \\ .0625 \\ \hline 62 + 0.6875 \end{array}$

62.6875_{10}

$0\ 11\ 110\ .\ 011\ 11^0_2$

$3\quad 6\ .\ 3\quad 6_8$

$0011\ 110\ .\ 011\ 11000$

$1\ E\ .\ 7\quad 8_{16}$

$1 \cdot 16^1 + E \cdot 16^0 + 7 \cdot 16^{-1} + 8 \cdot 16^{-2}$

$16 + E + 7 \cdot (0.0625) + 8 \cdot (0.00390625)$

$16 + 14 + (0.4375) + (0.03125)$

$\begin{array}{r} 0.03125 \\ 0.43750 \\ \hline 0.46875 \end{array}$

$30 + 0.46875 = 30.46875_{10}$

62.6875_{10}
111110.1011_2
76.54_8
$3E.B_{16}$

11110.01111_2
30.46875_{10}
36.36_8
$1E.78_{16}$

67.1_{10}

$$001\ 000\ 011\ .\ 0001\ 1001\ 1001\ 1001\ 1001\ 1001$$
$$1\quad 0\quad 3\ .\ 0\quad 6\quad 3\quad 1\quad 4\quad 6\quad 3_8$$

Division (integer part):

- (33) 2)67 r1
- −66
- 1
- (16) 2)33 r1
- −2 2
- 13
- 12
- 1
- (8) 2)16 r0
- 16
- 0
- (4) 2)8 r0
- (2) 2)4 r0
- (1) 2)2 r0
- 1 r1

Fractional part (×2):

.1
×2
0 . 2
2
0 . 4
2
0 . 8
2
1 . 6
2
1 . 2
2
1 . 2
2
0 . 4
2
0 . 8
2
1 . 6
2
1 . 2
2
0 . 4
2
0 . 4
2
1 . 6
2
1 . 2

Box:

67.1_{10}
103.06314_8
43.19_{16}
1000011.00011_2

Right column (grouping):

$$\frac{010\,000\,11\ .\ 000\,11\,0011\,0011\,0011\,0011\,0011\,0011}{4\quad 3\ .\ 1\quad 9\quad 9\quad 9\quad 9\quad 9\quad 9\quad 9}$$