

$$2_{10} = 2 \times 2^0 = 10_2 \times 2^0 = 0.10 \times 2^2$$

[illegible]

$$.875_{10} = 0.111_2 \times 2^0$$

$$\rightarrow .875_{10} = 0.111_2 \times 2^0 = 01110000 \mid 00000000 \mid 00000000 \mid 00000000$$

011,100,00 | 0,000,000,0 | 00,000,000 | 000,000,00

3 4 0 0 0 0 0 0 0 8

check
 $\rightarrow \cdot 2E_{16} = \frac{2}{16} + \frac{14}{16^2} = 0.1796875$

[illegible]

$$(b) -2.875_{10}$$

By last page

$$-2_{10} = \frac{11000000}{16} + \frac{00000000}{16} + \frac{00000000}{16} + \frac{00000000}{16}$$

$$\rightarrow -2.8_{16}$$

$$-0010.1110_2$$

$$\rightarrow -0.101110 \times 2^2$$

$$1.10111000 | 00000000 | 00000000 | 00000010$$

$$1.0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 2_{16}$$

$$1.10111000 | 00000000 | 00000000 | 00000010$$

$$6 \quad 7 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 2_8$$

$$-0.1796875$$

$$\rightarrow -2.8_{16}$$

$$-0.0010.1110_2$$

$$\rightarrow -0.101110 \times 2^2$$

$$-0.056_8$$

$$1.10111000 | 00000000 | 00000000 | 00000010$$

$$1.0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 2_{16}$$

$$1.10111000 | 00000000 | 00000000 | 00000010$$

$$6 \quad 7 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 4 \quad 0 \quad 2_8$$

num = 59999901

exp = 20

0.10110011001100110011001100110000001

0.1011001100110011001100110011001 x 2²¹

-51.0110011001100110011001

1.666661

$\rightarrow -666661_{16} = \frac{6}{16} + \frac{6}{16^2} + \frac{6}{16^3} + \frac{6}{16^4} + \frac{6}{16^5} + \frac{1}{16^6}$

20.3999999678

[illegible]

$$\begin{aligned} \bullet C C C C C &= \frac{12}{16} + \frac{12}{16} + \frac{12}{16} + \frac{12}{16} + \frac{12}{16} + \frac{1}{16} \\ &= 0.7999999999 \\ &\approx 0.8 \end{aligned}$$

check

$$\therefore 1624995_{10} = -2.399993 \times 16^1$$

$$0.599993 \times 16 = -9.599885$$

$$0.599885 \times 16 = 9.598165$$

$$0.598165 \times 16 = 9.570640$$

$$0.570640 \times 16 = 9.130238$$

0.130238 x 16224093807