

$$\textcircled{1} \quad 0.25_{10} = 0.01_2 = 0.2_8 = 0.4_{16}$$

Base 2

$$0.25 \times 2 = 0.50 \quad 0$$

$$0.50 \times 2 = 1.00 \quad 1 = 0.01_2$$

Base 8

$$\text{From } \textcircled{1} \quad 0.01_2 = 0.010_2 = 0.2_8$$

Base 16

$$\text{From } \textcircled{1} \quad 0.01_2 = 0.0100_2 = 0.4_{16}$$

$$\textcircled{2} \quad 0.25_8$$

To base ~~10~~ 10

$$0.25_8 = \frac{2}{8} + \frac{5}{8^2} = 0.328125_{10}$$

$$0.328125_{10}$$

To base  $\textcircled{2}$

$$0.328125_{10} \times 2 = 0.65625 \quad 0$$

$$0.65625 \times 2 = 1.3125 \quad 1$$

$$0.3125 \times 2 = 0.625 \quad 0$$

$$0.625 \times 2 = 1.25 \quad 1$$

$$0.25 \times 2 = 0.50 \quad 0$$

$$0.5 \times 2 = 1 \quad 1$$

$$0.25_8 = 0.010101_2$$

To base  $\textcircled{16}$

$$0.010101_2 = 0.0101 \quad 01$$

5      4

$$= 0.54_{16}$$

$$0.25_8 = 0.010101_2 = 0.328125_{10} = 0.54_{16}$$



Ire

3  $0.25_{16}$

$$= \frac{2}{16} + \frac{2}{16^2} = 0.14453125_{10}$$

$$0.14453125 \times 2 = 0.2890625 \quad 0$$

$$0.2890625 \times 2 = 0.578125 \quad 0$$

$$0.578125 \times 2 = 1.15625 \quad 1$$

$$0.15625 \times 2 = 0.3125 \quad 0$$

$$0.3125 \times 2 = 0.625 \quad 0$$

$$0.625 \times 2 = 1.25 \quad 1$$

$$0.25 \times 2 = 0.50 \quad 0$$

$$0.50 \times 2 = 1 \quad 1$$

$$0.001 \quad 001 \quad 01$$

$$1 \quad 1 \quad 2 = 0.112_8$$

$$0.25_{16} = 0.00100101_2 = 0.112_8 = 0.14453125_{10}$$

4  $0.1101_2$

$$0.110 \quad 1 = 0.64_8$$

$$6 \quad 4$$

$$0.84 = \frac{6}{8} + \frac{4}{8^2} = 0.8125_{10}$$

Base (16)

$$0.1101$$

D.

$$= 0.D_{16}$$

$$0.1101_2 = 0.64_8 = 0.8125_{10} = 0.D_{16}$$