

Nama : Prames Ray Lapian

Kelas : A

NPM : 1400102100009

1. $78_{10} = \dots_{16}$

$$\begin{array}{r|l} 78 / 16 = 4 & 14 (E) \\ 4 / 16 = 0 & 4 \end{array}$$

Hasil : $78_{10} = 4E_{16}$

2. $10111000_2 = \dots_8$

$$\begin{array}{c} 010 | 111 | 000 \\ 2 \quad 7 \quad 0 \end{array}$$

Hasil : $10111000_2 = 270_8$

3. $56_8 = \dots_{10}$

$$6 \times 1 = 6$$

$$5 \times 8 = \frac{40}{46}$$

Hasil : $56_8 = 46_{10}$

4. $7C_{16} = \dots_2$

$$7 = 0111$$

$$C = 1100$$

Hasil : $7C_{16} = 01111100_2$

5. a. $12_{10} + 20_{10}$

$$\rightarrow 12_{10} = 110_2$$

$$\rightarrow 20_{10} = 1010_2$$

$$\begin{array}{r} 110 \\ + 1010 \\ \hline 10000 \end{array}$$

Hasil : $10000_2 = 32_{10}$

b. $9_{10} - 3_{10}$

$$\rightarrow 9_{10} = 1001_2$$

$$\rightarrow 3_{10} = 11_2$$

$$\begin{array}{r} 1001 \\ - 11 \\ \hline 1110 \end{array}$$

$$\begin{array}{r} 01001 \\ - 1110 \\ \hline 00110 \end{array}$$

Hasil : $0110_2 = 6_{10}$

c. $2_{10} \times 3_{10}$

$$\rightarrow 2_{10} = 10_2$$

$$\rightarrow 3_{10} = 11_2$$

$$\begin{array}{r} 10 \\ \times 11 \\ \hline 10 \\ 110 \\ \hline 110 \end{array}$$

Hasil : $110_2 = 6_{10}$