

Tugas 3 Pola Pikir Digital

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 Kelas : IF - 4

Soal:

1. $6A_{16} + 1101011_2 = \dots 8$
2. $3FE8_{16} + 56_8 = \dots 2$
3. $6A_{16} + 56_8 = \dots 2$
4. $6A_{16} + 56_8 = \dots 10$
5. $6A_{16} + BCF2_{16} = \dots 2$

6. $56_{16} + 1101011_2 = \dots 10$
7. $3FE9_{16} + 1101011_2 = \dots 2$
8. $6A_{16} + 1101011_2 = \dots 10$

Jawaban : 38

① $6A_{16}$
 $0110\ 1010$
 $0110\ 1011$
 $\hline 1101\ 0101$
 \downarrow
 $011\ 010\ 101 \rightarrow$ kelompokkan menjadi 3
 $3\ 2\ 5 = \cancel{3258}\ 325_8$

③ $6A_{16}$ 56_8
 $0110\ 1010$ $101\ 110$
 $\hline 0110\ 1010$
 $10\ 1110 +$
 $\hline 1001\ 1000\ 2$

② $3FE8_{16}$
 \downarrow
 $0011\ 1111\ 1110\ 1000$
 $5\ 6_8$
 $101\ 110 \rightarrow$ konversi ke biner
 $\hline 11\ 1111\ 1110\ 1000$
 $0110\ 1110 +$
 $\hline 1000000\ 0001\ 0110$

④ $6A_{16}$ 56_8
 $16 \times 16 \times$ $8 \times 8 \times$
 $96 + 10$ $40 + 6$
 $106 + 46$
 152_{10}

$\hline 1000000\ 0001\ 0110$
 $= 1000\ 0000\ 0010\ 110$

$$\begin{array}{r}
 \textcircled{5} \quad \begin{array}{cccccc}
 6 & A_{16} & B & C & F & 2 \\
 0110 & 1010 & 1101 & 1100 & 1111 & 0010 \\
 1011 & 1100 & 1111 & 0010 & & \\
 & & 0110 & 1010 & & + \\
 \hline
 1011 & 1101 & 0101 & 1100 & & 2
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \textcircled{7} \quad \begin{array}{cccc}
 3 & F & E & 9 \\
 0011 & 1111 & 1110 & 1001 \\
 & & 110 & 1011 + \\
 \hline
 100 & 0000 & 0101 & 0100 2
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \textcircled{6} \quad \begin{array}{cc}
 5 & 6 \\
 0101 & 0110 \\
 110 & 1011_2 \\
 \hline
 1100 & 0011 \\
 \text{2's 2's 2's} & \text{2's 2's 2's} \\
 128 + 64 + 0 + 0 + 0 + 0 + 2 + 1 = 195_{10}
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \textcircled{8} \quad \begin{array}{cc}
 6 & A_{16} \\
 96_x & 16_x \\
 96 + 10 = 106_{10}
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \begin{array}{cc}
 1101 & 011_2 \\
 \text{2's 2's 2's} & \text{2's 2's} \\
 \hline
 64 + 32 + 0 + 8 + 0 + 2 + 1 = 107_{10} \\
 = 106 + 107_{10} \\
 = 213_{10}
 \end{array}
 \end{array}$$