

Q. Find the binary equivalent of 27, 144, 52, 9, 70

$$\begin{array}{r|l} 2 & 27 \\ \hline & 13 \\ \hline & 6 \\ \hline & 3 \\ \hline & 1 \end{array} \quad \begin{array}{l} 1 \\ 1 \\ 0 \\ 1 \\ 1 \end{array}$$

$$(27)_{10} = (11011)_2$$

$$\begin{array}{r|l} 2 & 144 \\ \hline & 72 \\ \hline & 36 \\ \hline & 18 \\ \hline & 9 \\ \hline & 4 \\ \hline & 2 \\ \hline & 1 \end{array} \quad \begin{array}{l} 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0 \\ 0 \\ 1 \end{array}$$

$$(144)_{10} = (10010000)_2$$

$$\begin{array}{r|l} 2 & 52 \\ \hline & 26 \\ \hline & 13 \\ \hline & 6 \\ \hline & 3 \\ \hline & 1 \end{array} \quad \begin{array}{l} 0 \\ 0 \\ 1 \\ 0 \\ 1 \\ 1 \end{array}$$

$$(52)_{10} = (110100)_2$$

$$\begin{array}{r|l} 2 & 9 \\ \hline & 4 \\ \hline & 2 \\ \hline & 1 \end{array} \quad \begin{array}{l} 1 \\ 0 \\ 0 \\ 1 \end{array}$$

$$(9)_{10} = (1001)_2$$

e)	70	0
2		
2	35	1
2	17	1
2	8	0
2	4	0
2	2	0

$$(70)_{10} = (1000110)_2$$

$$\begin{array}{r} \cancel{1}2 \mid 7 \\ \hline \end{array}$$

1

$$\cancel{1} \mid$$

0

$$\begin{array}{r} 2 \mid 3 \\ \hline \end{array}$$

1

1

$$(0)_B = 0$$

0

$$(7)_{10} = (1111)_2$$