

Worksheet
1/13/2020

1. Convert 211 from decimal system to binary system.

See Example 1 in Lecture 5.

2. Convert 6.13 from decimal system to binary system. Then round your answer to 4 digits after the binary point.

$$\begin{array}{rcl} 6.13 & = & \underbrace{6} + \underbrace{0.13} \\ & & (100)_2 \quad (0.001\dots)_2 \\ & & (\text{Example 1}) \quad (\text{Example 2}) \end{array}$$

3. Convert 101.01011 from binary system to decimal system.

$$\begin{array}{ccccccccc} 2^2 & + & 2^0 & + & 2^{-2} & + & 2^{-4} & + & 2^{-5} & = & \dots \\ \hline 4 & & 1 & & 0.25 & & \dots & & \dots & & \end{array}$$

4. Perform the multiplication 1.101×1.111 in binary system. Then round your answer to 3 digits after the binary point.

See the last example in Lecture 5.