

$$15 = 1111$$

$$\begin{array}{r}
 15 \\
 \underline{2} \\
 7 \text{ R } 1 \\
 2 \\
 \underline{2} \\
 3 \text{ R } 1 \\
 2 \\
 \underline{2} \\
 1 \text{ R } 1 \\
 2 \\
 \underline{0} \text{ R } 1
 \end{array}$$

Diagram showing the conversion of 15 to binary (1111) using repeated division by 2. The remainders are 1, 1, 1, 1, which are read from bottom to top to form the binary number 1111.

$$10000$$

$$2^4 = 16$$

1 0 1 0

$$1 \cdot 2^3 + 1 \cdot 2^1 = 10$$

$$\begin{array}{r} 12 \\ \underline{2} \\ 4R0 \\ \underline{2} \\ 3R0 \\ \underline{2} \\ 1R1 \\ \underline{1} \\ 0R1 \end{array}$$

$$\begin{array}{c|ccc|ccc|cc} 0 & 1 & 0 & 0 & 1 & 1 & 1 & 0 & 1 & 0 & 0 & 1 \\ \hline & 4 & & & 14 & & & 9 & & & & \end{array} = 4E9$$

$$ABC = 10101011 \quad 1100$$

$10, 11, 12$

$$11111111 = 255$$

$$2^m - 2 = 7$$

$$2^3 = 8$$

$$(n = 4)$$

$$\underline{11110000} = \underline{\underline{240}}$$

1111

255.255.255.240