

Convert 72₁₀ to binary (base 2) Column Value Method

72	$\begin{array}{cccccccc} \overline{128} & \overline{64} & \overline{32} & \overline{16} & \overline{8} & \overline{4} & \overline{2} & \overline{1} \\ 128 & 64 & 32 & 16 & 8 & 4 & 2 & 1 \end{array}$	1. Find largest column less than your number
72 - 64 = 8	$\begin{array}{cccccccc} \overline{1} & & & & & & & \\ \overline{128} & \overline{64} & \overline{32} & \overline{16} & \overline{8} & \overline{4} & \overline{2} & \overline{1} \\ 128 & 64 & 32 & 16 & 8 & 4 & 2 & 1 \end{array}$	2. Place a 1 in that column. Subtract column value from your number to get a new number (8)
72 - 64 = 8	$\begin{array}{cccccccc} \overline{1} & & & & \overline{1} & & & \\ \overline{128} & \overline{64} & \overline{32} & \overline{16} & \overline{8} & \overline{4} & \overline{2} & \overline{1} \\ 128 & 64 & 32 & 16 & 8 & 4 & 2 & 1 \end{array}$	3. Repeat step 1 & 2 until you get to zero as your new number
	$\begin{array}{cccccccc} \overline{0} & \overline{1} & \overline{0} & \overline{0} & \overline{1} & \overline{0} & \overline{0} & \overline{0} \\ 128 & 64 & 32 & 16 & 8 & 4 & 2 & 1 \end{array}$	4. Fill in the remaining columns with zeros.