**Watch the Videos Below**:

*Binary Number System*

[number-systems-introduction](https://www.khanacademy.org/math/pre-algebra/applying-math-reasoning-topic/alternate-number-bases/v/number-systems-introduction)

[decimal-to-binary](https://www.khanacademy.org/math/pre-algebra/applying-math-reasoning-topic/alternate-number-bases/v/decimal-to-binary)

[large-number-decimal-to-binary](https://www.khanacademy.org/math/pre-algebra/applying-math-reasoning-topic/alternate-number-bases/v/large-number-decimal-to-binary)

*Fill in the blanks to each of the statements, converting the values from decimal to binary.*

111 in decimal is equal to in binary.

Powers of 2 Table

20 🡪 1

21 🡪 2

22 🡪 4

23 🡪 8

24 🡪 16

25 🡪 32

26 🡪 64

27 🡪 128

28 🡪 256

25 in decimal is equal to in binary.

34 in decimal is equal to in binary.

89 in decimal is equal to in binary.

90 in decimal is equal to in binary.

71 in decimal is equal to in binary.

126 in decimal is equal to in binary.

80 in decimal is equal to in binary.

35 in decimal is equal to in binary.

24 in decimal is equal to in binary.

5 in decimal is equal to in binary.

133 in decimal is equal to in binary.

134 in decimal is equal to in binary.

218 in decimal is equal to in binary.

228 in decimal is equal to in binary.

202 in decimal is equal to in binary.

248 in decimal is equal to in binary.

252 in decimal is equal to in binary.

181 in decimal is equal to in binary.

240 in decimal is equal to in binary.

27 in decimal is equal to in binary.

51 in decimal is equal to in binary.

130 in decimal is equal to in binary.

144 in decimal is equal to in binary.

28 in decimal is equal to in binary.

118 in decimal is equal to in binary.

255 in decimal is equal to in binary.