Binary Numbers

In the binary number system we write numbers using just two digits ( 0 and 1) and the place values are powers of 2.

$$
\begin{aligned}
\text { sixty-fours } & 2^{6}=64 \\
\text { thirty-twos } & 2^{5}=32 \\
\text { sixteens } & 2^{4}=16 \\
\text { eights } & 2^{3}=8 \\
\text { fours } & 2^{2}=4 \\
\text { twos } & 2^{1}=2 \\
\text { ones } & 2^{0}=1
\end{aligned}
$$

$$
\overline{64 s} \overline{32} s \overline{16} \overline{8 s} \overline{4 s} \overline{2 s} \overline{1 s}
$$

Write the number of dots shown in the base-two notation. Then write the number of dots in the base 10 notation.


Base 2 :


Base 10:
$\overline{100} 510 \mathrm{~s} 1 \mathrm{~s}$


Base 2:


Base 10: $\qquad$


Base 2 :


Base 10: $\qquad$ 100s 10 s 1 s


- $\bullet$
$\bullet$

Base 2 : $\qquad$ - -

64s 32s 16 s 8 s 4 s 2 s 1 s

Base 10: $\qquad$

