unit 1

 Fact: A hexadecimal number is a special kind of number used by people to write LONG binary numbers in a compact way.

unit 1

 Fact: *Hexadecimal* is really nothing more than a new cipher using the following mapping.

Hexadecimal		Binary
Digit		Nibble
\mathbf{O}_{16}	\Leftrightarrow	0000_{2}
116	\Leftrightarrow	00012
2,6	\Leftrightarrow	0010 ₂
316	\Leftrightarrow	00112
4,6	\Leftrightarrow	0100 ₂
5 ₁₆	\Leftrightarrow	0101 ₂
616	\Leftrightarrow	0110 ₂
7,6	\Leftrightarrow	0111 ₂
816	\Leftrightarrow	10002
$9_{\scriptscriptstyle 16}$	\Leftrightarrow	10012
\mathbf{A}_{16}	\Leftrightarrow	1010 ₂
$B_{\scriptscriptstyle 16}$	\Leftrightarrow	1011 ₂
$C_{\scriptscriptstyle 16}$	\Leftrightarrow	1100 ₂
$D_{\scriptscriptstyle 16}$	\Leftrightarrow	1101 ₂
E ₁₆	\Leftrightarrow	1110 ₂
F ₁₆	\Leftrightarrow	1111 ₂