More Examples

Seven-Segment Display Decoder Example

http://www.play-hookey.com/digital/experiments/seven_seg_led.html

http://www.answers.com/topic/seven-segment-display
Turn on the segment ‘e’
Turn on the segment ‘e’
Turn on the segment ‘e’
Turn on the segment ‘e’
Turn on the segment ‘e’
Turn on the segment ‘e’
More Examples

s = 0

a → z = a
b

s = 1

a → z = b
b

s

\[ s = 0 \Rightarrow z = a \]

\[ s = 1 \Rightarrow z = b \]
\[
\begin{array}{c|c|c|c|c}
 s & a & b & z \\
\hline
 0 & 0 & 0 & 0 \\
 0 & 0 & 1 & 1 \\
 0 & 1 & 0 & 0 \\
 0 & 1 & 1 & 1 \\
 1 & 0 & 0 & 0 \\
 1 & 0 & 1 & 1 \\
 1 & 1 & 0 & 0 \\
 1 & 1 & 1 & 1 \\
\end{array}
\]
\[ z = a \bar{s} + b s \]
\[ z = a \overline{s} + b s \]

2 to 1 Multiplexer (MUX)
\[ z = a \overline{s} + bs \]

2 to 1 Multiplexer (MUX)