

**Problem Solutions to Problems Marked With a * in
Logic Computer Design Fundamentals, Ed. 2**

CHAPTER 6

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6-1.

a) $A = 13, D = 32$ b) $A = 18, D = 64$ c) $A = 25, D = 32$ d) $A = 32, D = 8$

6-3.

$(633)_{10} = (10\ 0111\ 1001)_2$, $(2731)_{10} = (0000\ 1010\ 1010\ 1011)_2$

6-9.

a) 32 b) 20,15 c) 5, 5-to-32

6-15.

PTERM		INPUTS			OUTPUTS			
		X	Y	Z	A	\bar{B}	C	D
YZ	1	-	1	1	1	1	-	1
XY	2	1	1	-	1	-	-	-
$\bar{X}Y$	3	0	1	-	-	1	1	1
$X\bar{Y}\bar{Z}$	4	1	0	0	-	-	1	1

6-18.

PTERM		INPUTS			
		A	B	C	D
A	1	1	-	-	-
BC	2	-	1	1	-
BD	3	-	1	-	1
$\bar{B}C$	4	-	0	1	-
$\bar{B}D$	5	-	0	-	1
\overline{BCD}	6	-	1	0	0
CD	7	-	-	1	1
$\bar{C}\bar{D}$	8	-	-	0	0
-	-	-	-	-	-
\bar{D}	9	-	-	-	0
-	-	-	-	-	-
-	-	-	-	-	-