7 - Segment LED. I'll label each segment

	Top (a)	
b		c
	Middle (d)	
e		f
	g	

The follow table shows which segments light up for which number.

```
        A
       ___
    b |     | c
      _ d _
    e |     | f
      _ g _
```
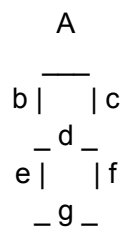
Truth table for the 7-segment decoder

w	x	y	z		a	b	c	d	e	f	g
0	0	0	0		1	1	1	0	1	1	1
0	0	0	1		0	0	1	0	0	1	0
0	0	1	0		1	0	1	1	1	0	1
0	0	1	1		1	0	1	1	0	1	1
0	1	0	0		0	1	1	1	0	1	0
0	1	0	1		1	1	0	1	0	1	1
0	1	1	0		0	1	0	1	1	1	1
0	1	1	1		1	0	1	0	0	1	0
1	0	0	0		1	1	1	1	1	1	1
1	0	0	1		1	1	1	1	0	1	0
1	0	1	0		1	1	0	1	1	0	1

1	0	1	1								
1	1	0	0								
1	1	0	1								
1	1	1	0								
1	1	1	1								

Kmap - A segment

wx\yz	00	01	11	10
00	1		1	1
01		1	1	
11	1	1	1	1
10	1	1	1	1

A = w + x'z' + xz + yz

Kmap - B segment

wx\yz	00	01	11	10
00	1	0	0	0
01	1	1	0	1
11	1	1	1	1
10	1	1	1	1

B = w + y'z'+xy'+xz'

Kmap - C segment

wx\yz	00	01	11	10
00	1	1	1	1
01	1		1	
11				

10	1	1		

C = w'x' + x'y' + w'y'z' + w'yz

Kmap - D segment

wx\yz	00	01	11	10
00			1	1
01	1	1		1
11	1	1	1	1
10	1	1	1	1

D = w + xy' + xz' + x'y

Kmap - E segment

wx\yz	00	01	11	10
00	1			1
01				1
11	1	1	1	1
10	1		1	1

E = x'z' + wx + yz' + wy

Kmap - f segment

wx\yz	00	01	11	10
00	1	1	1	
01	1	1	1	1
11				
10	1	1		

F = x'y' + w'x + w'z

Kmap - g segment

wx\yz	00	01	11	10
00	1			1
01		1		1
11	1	1	1	1
10	1		1	1

G = x'z' + x'y + yz' + wx + xy'z