

## Samples of Karnaugh–Veitch Maps

```
let x = -1
karnaugh(("AB", "CD"), // Labels in string
  implicants: (
    // (x, y, length/width, optional height)
    (1, 1, 2),
    (2, 0, 2)
  ),
  (
    // Any number that is neither 0 or 1 will
    // be treated as don't-care.
    (0, 0, 0, x),
    (0, 1, x, 0),
    (1, 1, 1, 0),
    (x, 1, 0, x),
  )
)
```

		$CD$			
		00	01	11	10
$AB$	00				*
	01		1	*	
	11	1	1	1	
	10	*	1		*

Fig. 1. Map of an incompletely specified function

```
karnaugh(("C", "AB"),
  implicants: (
    (0, 1, 1, 2),
    (1, 2, 2, 1),
  ),
  (
    (0, 1, 0, 0),
    (0, 1, 1, 1),
  ),
  // Allow zero to appear
  show-zero: true
)
```

		$AB$			
		00	01	11	10
$C$	0	0	1	0	0
	1	0	1	1	1

Fig. 2. Zeros are not ignored

```
karnaugh(
  (
    // Labels in math mode
    ($I_2$,), ($I_1$, $I_0$)
  ),
  implicants: (
    // `(0, 3, 2)` moves outside the frame
    // but will come back
    (0, 3, 2),
    (1, 0, 4, 1),
  ),
  (
    (1, 0, 0, 1),
    (1, 1, 1, 1),
  )
)
```

		$I_1 I_0$			
		00	01	11	10
$I_2$	0	1			1
	1	1	1	1	1

Fig. 3. Crossing implicant