

## Mapas de Karnaugh

**Q0+**

	$\overline{X_1 X_2}$	$\overline{X_1} X_2$	$X_1 X_2$	$X_1 \overline{X_2}$
$\overline{Q_{0+}} \overline{Q_{1+}} \overline{Q_{2+}}$	0	0	0	0
$\overline{Q_{0+}} \overline{Q_{1+}} Q_{2+}$	0	0	0	0
$\overline{Q_{0+}} Q_{1+} \overline{Q_{2+}}$	0	1	0	0
$\overline{Q_{0+}} Q_{1+} Q_{2+}$	0	0	0	0

	$\overline{X_1 X_2}$	$\overline{X_1} X_2$	$X_1 X_2$	$X_1 \overline{X_2}$
$Q_{0+} \overline{Q_{1+}} \overline{Q_{2+}}$	1	0	0	1
$Q_{0+} \overline{Q_{1+}} Q_{2+}$	1	1	1	1
$Q_{0+} Q_{1+} \overline{Q_{2+}}$	X	X	X	X
$Q_{0+} Q_{1+} Q_{2+}$	X	X	X	X

**Q0+ Equação:**

$$y = Q_0 X_2' + Q_0 Q_2 + Q_1 Q_2 X_1' X_2$$

**Q1+**

	$\overline{X_1 X_2}$	$\overline{X_1} X_2$	$X_1 X_2$	$X_1 \overline{X_2}$
$\overline{Q_{0+} Q_{1+} Q_{2+}}$	0	0	0	0
$\overline{Q_{0+} Q_{1+} Q_{2+}}$	0	0	1	0
$\overline{Q_{0+} Q_{1+} Q_{2+}}$	1	0	1	0
$\overline{Q_{0+} Q_{1+} Q_{2+}}$	1	1	0	0

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	$\overline{X_1 X_2}$	$\overline{X_1} X_2$	$X_1 X_2$	$X_1 \overline{X_2}$
$Q_{0+} \overline{Q_{1+} Q_{2+}}$	0	0	1	0
$Q_0 \overline{Q_{1+} Q_{2+}}$	0	0	0	0
$Q_{0+} Q_{1+} Q_{2+}$	X	X	X	X
$Q_{0+} Q_{1+} \overline{Q_{2+}}$	X	X	X	X

**Q1+ Equação:**

$$y = Q_1 Q_2' X_1' + Q_1 X_1' X_2' + Q_0' Q_2 X_1 X_2 + Q_0 Q_2' X_1 X_2$$

**Q2+**

	$\overline{X_1 X_2}$	$\overline{X_1} X_2$	$X_1 X_2$	$X_1 \overline{X_2}$
$\overline{Q_{0+} Q_{1+} Q_{2+}}$	0	1	0	0
$\overline{Q_{0+} Q_{1+} Q_{2+}}$	1	1	0	0
$\overline{Q_{0+} Q_{1+} Q_{2+}}$	1	0	0	0
$\overline{Q_{0+} Q_{1+} Q_{2+}}$	0	1	0	0

	$\overline{X_1 X_2}$	$\overline{X_1} X_2$	$X_1 X_2$	$X_1 \overline{X_2}$
$Q_{0+} \overline{Q_{1+} Q_{2+}}$	0	1	0	1
$Q_0 \overline{Q_{1+} Q_{2+}}$	1	1	1	1
$Q_{0+} Q_{1+} Q_{2+}$	X	X	X	X
$Q_{0+} Q_{1+} \overline{Q_{2+}}$	X	X	X	X

**Q2+ Equação:**

$$y = Q_0 Q_2 + Q_1' X_1' X_2 + Q_2' X_1' X_2 + Q_2 X_1' X_2' + Q_0 X_1 X_2'$$

**OUTPUT (Y)**

	$\overline{X_1 X_2}$	$\overline{X_1} X_2$	$X_1 X_2$	$X_1 \overline{X_2}$
$\overline{Q_{0+} Q_{1+} Q_{2+}}$	0	0	0	0
$\overline{Q_{0+} Q_{1+} Q_{2+}}$	0	0	0	0
$\overline{Q_{0+}} Q_{1+} Q_{2+}$	0	0	0	0
$\overline{Q_{0+}} Q_{1+} \overline{Q_{2+}}$	0	0	0	0

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	$\overline{X_1 X_2}$	$\overline{X_1} X_2$	$X_1 X_2$	$X_1 \overline{X_2}$
$Q_{0+} \overline{Q_{1+} Q_{2+}}$	0	0	0	1
$Q_0 \overline{Q_{1+} Q_{2+}}$	1	1	1	1
$Q_{0+} Q_{1+} Q_{2+}$	X	X	X	X
$Q_{0+} Q_{1+} \overline{Q_{2+}}$	X	X	X	X

**OUTPUT Equação:**

$$y = Q_0 Q_2 + Q_0 X_1 X_2'$$