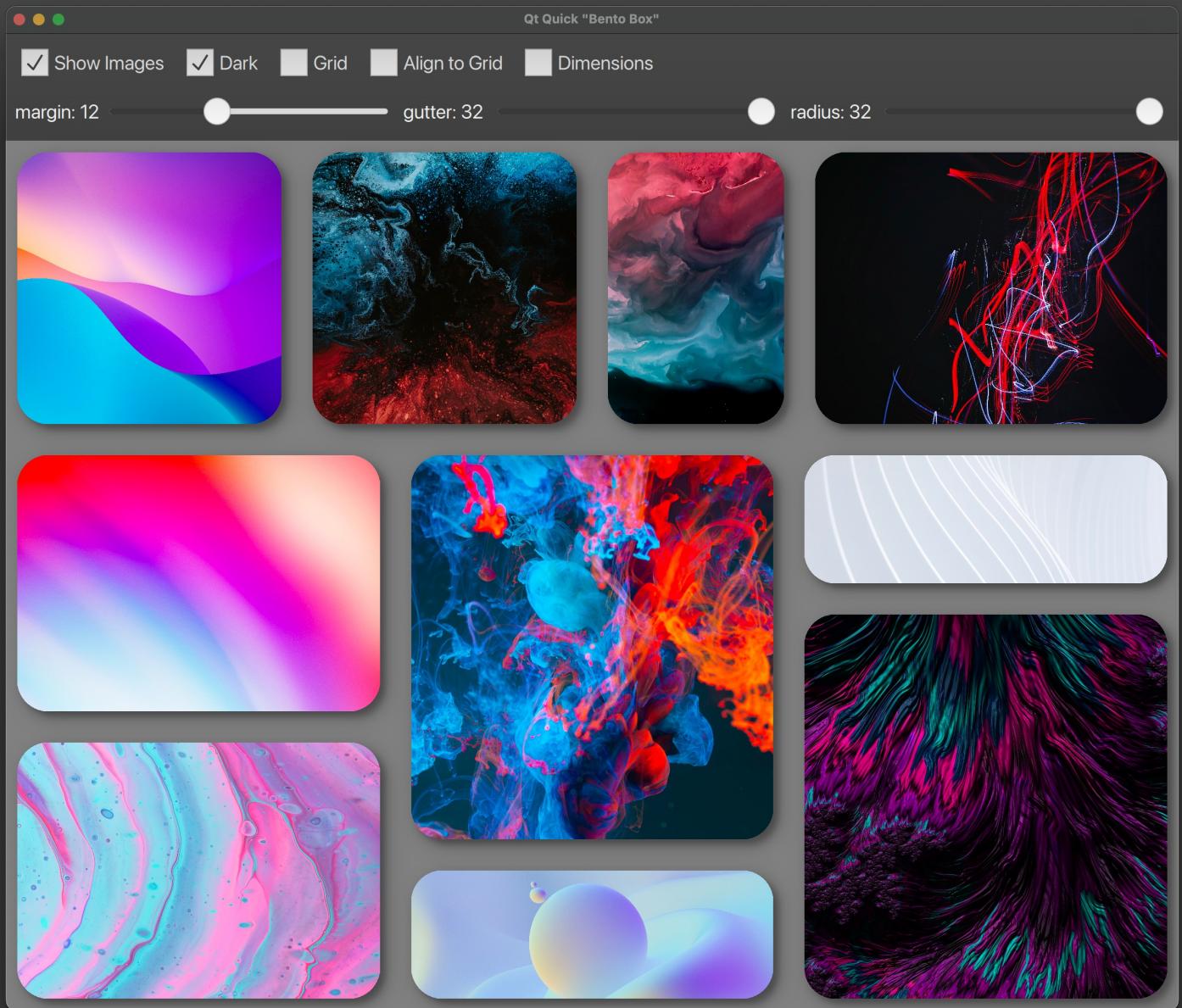


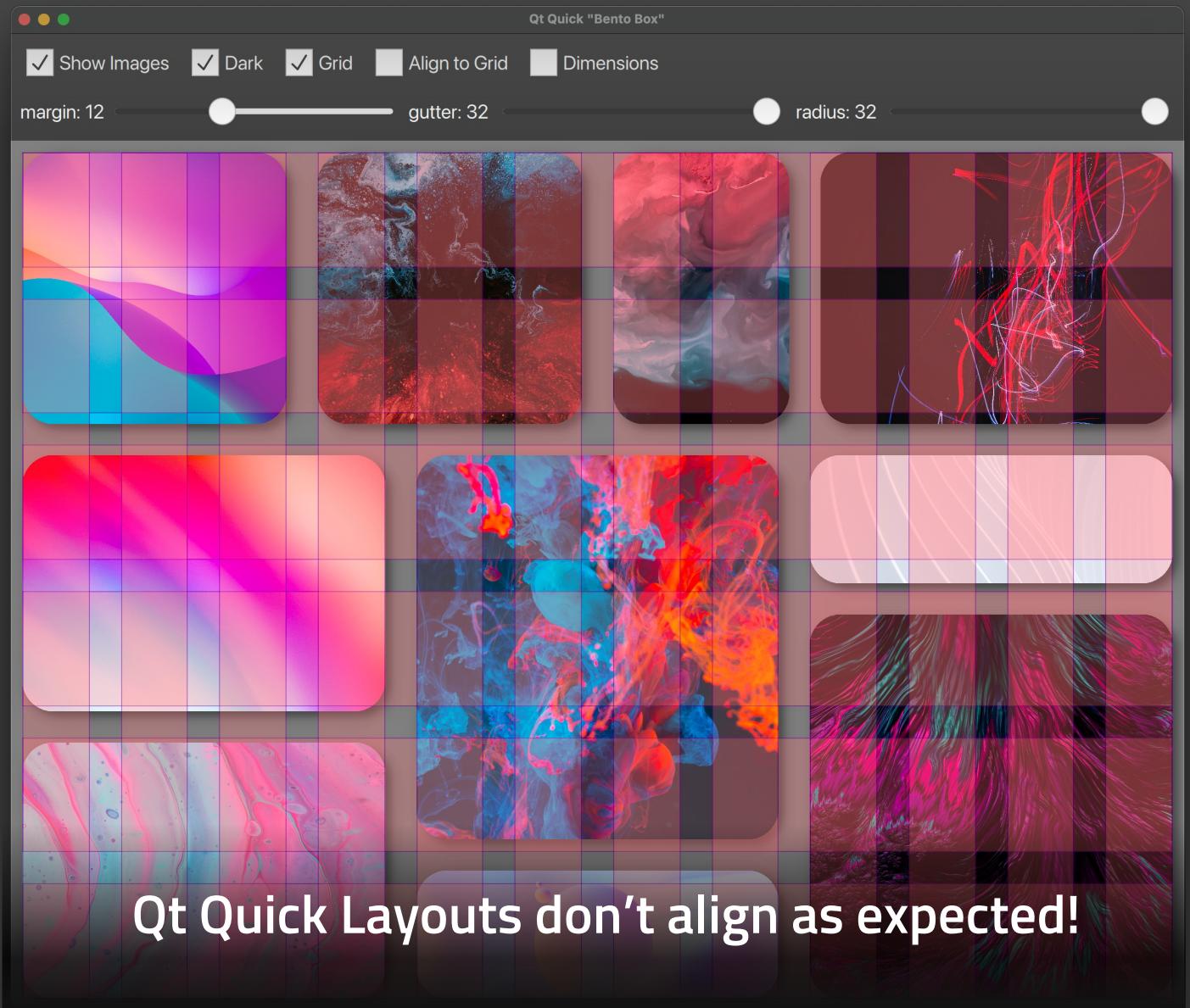
Bento Box

Looks nice... but is it
the grid we want?



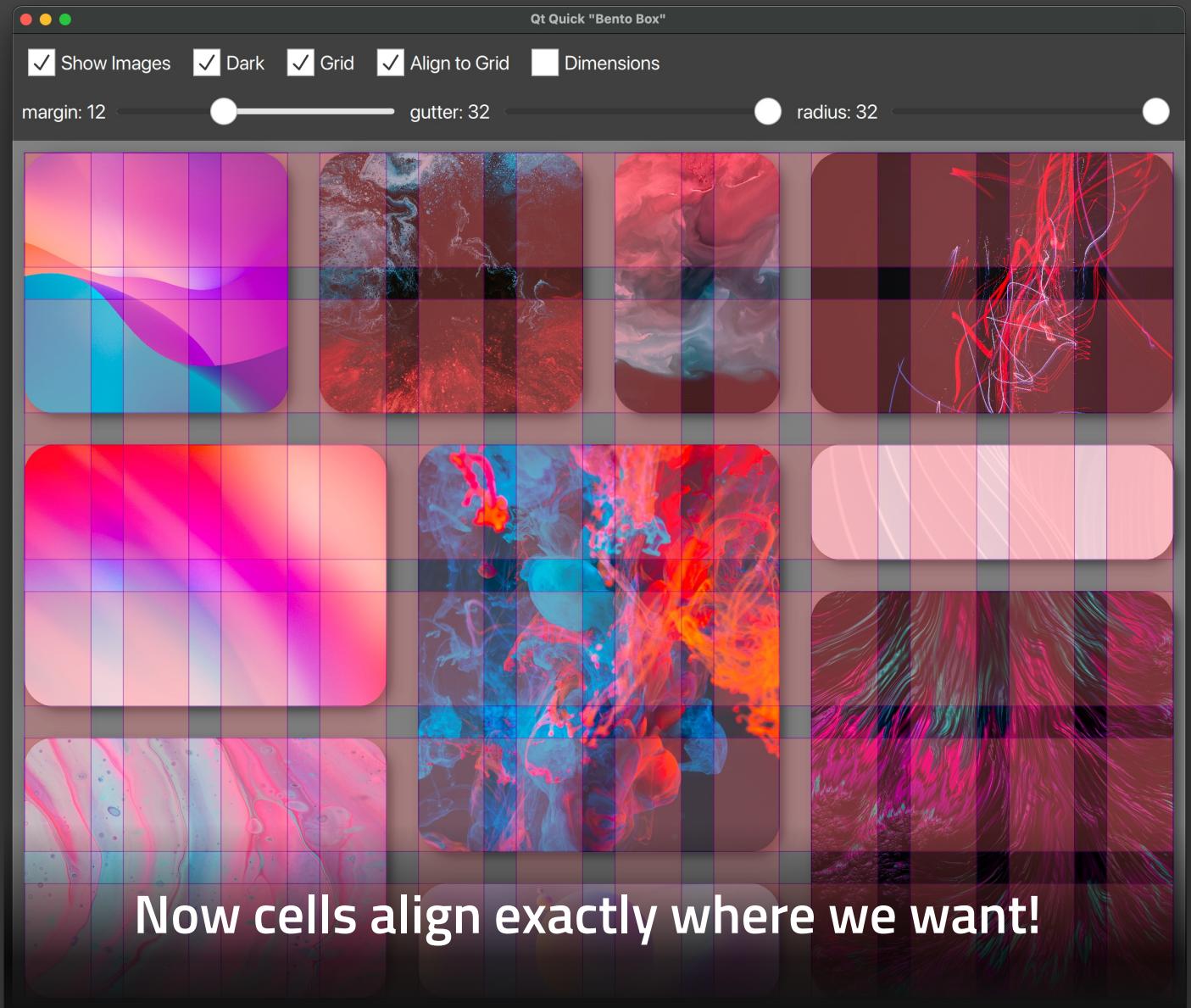
Bento Box

Let's make a 12x6
Qt Quick Layout:



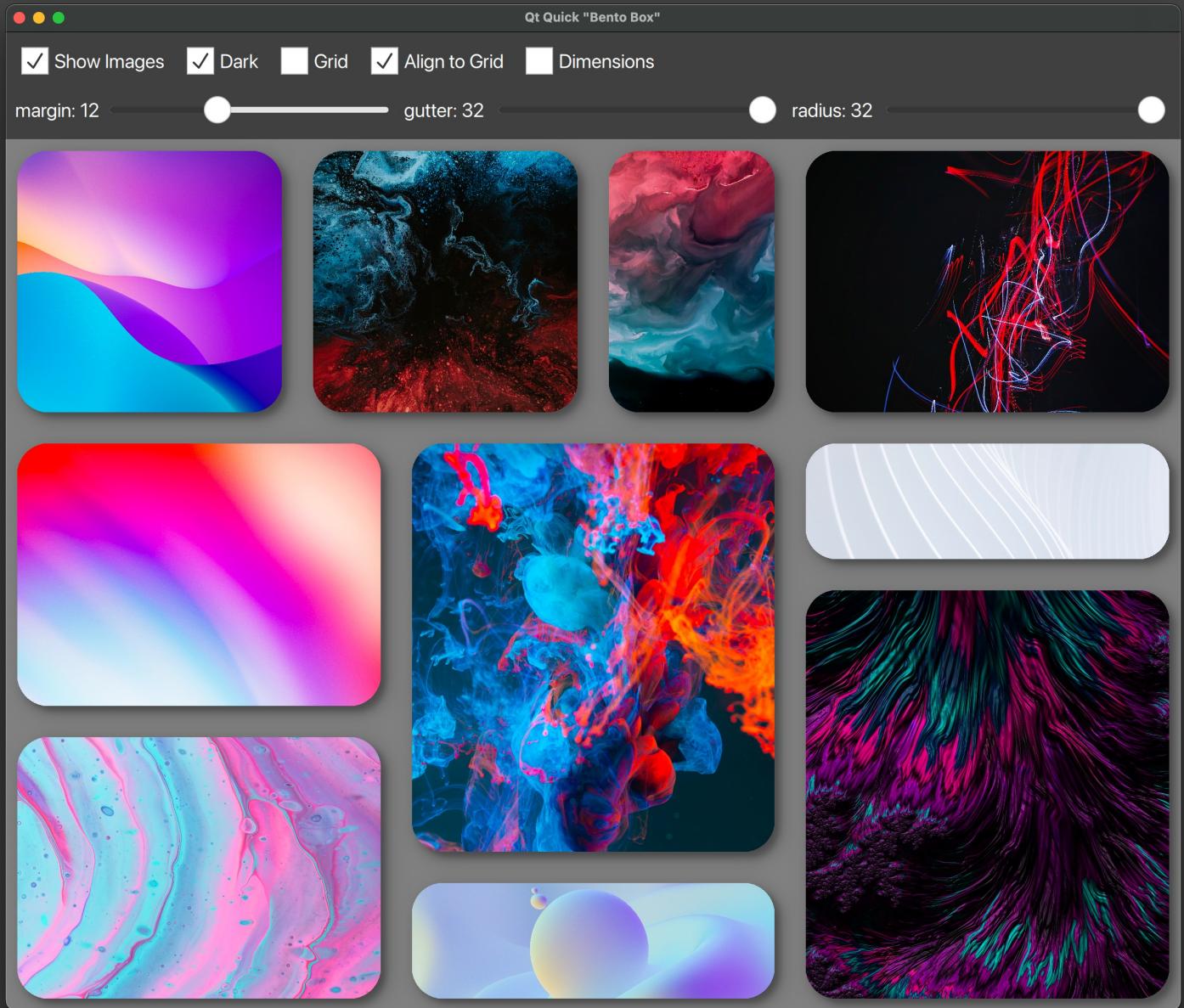
Bento Box

Now we align to our
“real” 12x6 grid!



Bento Box

That's better!
So what's different?



Bento Box

Qt 12x6 Layouts: The default math...

Qt Quick "Bento Box"

Show Images Dark Grid Align to Grid Dimensions

margin: 12 gutter: 32 radius: 32

Consider the top row:

Variable	Value	Calculation	Result
maxWidth	= 1200		
gutterCount	= cellCount (4) - 1		= 3
innerWidth	= maxWidth - 2 * margin		= 1176
gutterTotal	= gutterCount * gutter		= 96
availWidth	= innerWidth - gutterTotal		= 1080
cellWidth	= availWidth / columns		= 90
cell1Width	= 3 (columns) * cellWidth		= 270
cell2Width	= 3 (columns) * cellWidth		= 270
cell3Width	= 2 (columns) * cellWidth		= 180
cell4Width	= 4 (columns) * cellWidth		= 360

Bento Box

Our 12x6 Layouts:
The *correct* math...

Qt Quick "Bento Box"

Show Images Dark Grid Align to Grid Dimensions

margin: 12 gutter: 32 radius: 32

270, 267
270, 267
169, 267
371, 267

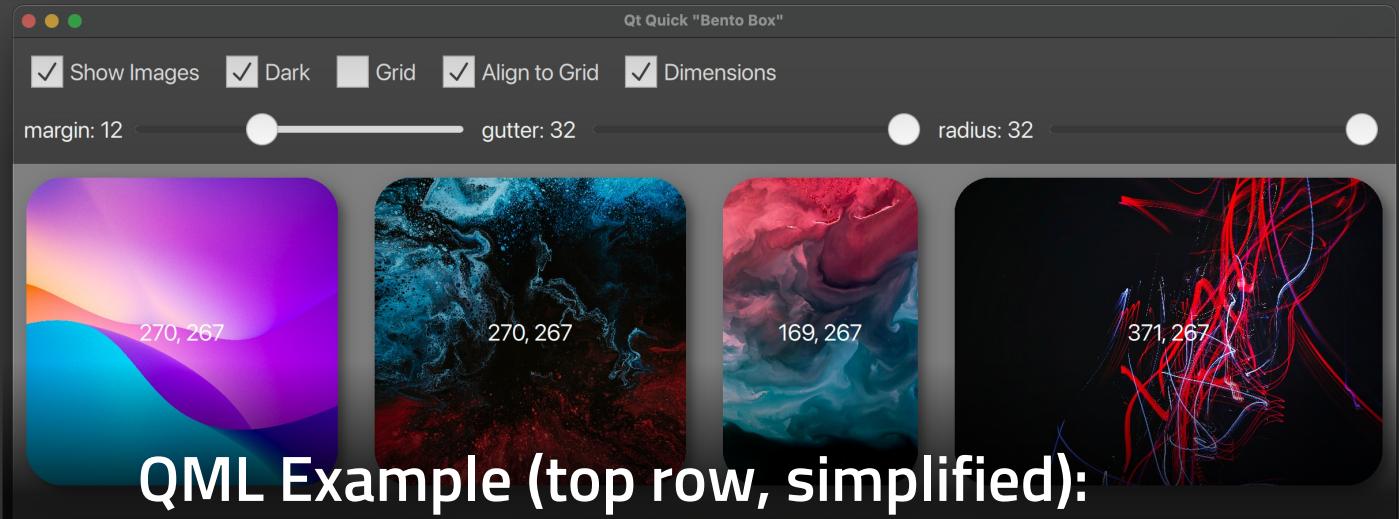
371, 118
371, 118

Consider again the top row (rounded):

Variable	Value	Calculation	Result
maxWidth	= 1200		
gutterCount	= columns	- 1	= 11
innerWidth	= maxWidth - 2 * margin		= 1176
gutterTotal	= gutterCount * gutter		= 352
availWidth	= innerWidth - gutterTotal		= 824
cellWidth	= availWidth / columns		= 69
cell1Width	= 3 (columns) * cellWidth		= 270
cell2Width	= 3 (columns) * cellWidth		= 270
cell3Width	= 2 (columns) * cellWidth		= 169
cell4Width	= 4 (columns) * cellWidth		= 371

Bento Box

How to get your gutters cleaned?



The screenshot shows a Qt Quick application window titled "Qt Quick "Bento Box"". At the top, there are several configuration checkboxes: "Show Images" (checked), "Dark" (checked), "Grid" (unchecked), "Align to Grid" (checked), and "Dimensions" (checked). Below these are three sliders: "margin: 12", "gutter: 32", and "radius: 32". The main area displays four rounded rectangular cards. The first card has a purple-to-blue gradient background and contains the coordinates "270, 267". The second card has a dark blue background with a red and blue abstract pattern and also contains "270, 267". The third card has a red-to-blue gradient background and contains "169, 267". The fourth card has a black background with red and blue abstract lines and contains "371, 267".

QML Example (top row, simplified):

```
GridCalculator { id: gridCalculator;
    rows: 6; columns: 12; anchors.fill: parent
    // boxWidth(colSpan), boxHeight(rowSpan) return values update dynamically
}
RowLayout {
    LayoutItemProxy { target: box1
        Layout.preferredWidth: gridCalculator.boxWidth(3)
        Layout.preferredHeight: gridCalculator.boxHeight(2)
    }
    LayoutItemProxy { target: box2
        Layout.preferredWidth: gridCalculator.boxWidth(3)
        Layout.preferredHeight: gridCalculator.boxHeight(2)
    }
    LayoutItemProxy { target: box3
        Layout.preferredWidth: gridCalculator.boxWidth(2)
        Layout.preferredHeight: gridCalculator.boxHeight(2)
    }
    LayoutItemProxy { target: box4
        Layout.preferredWidth: gridCalculator.boxWidth(4)
        Layout.preferredHeight: gridCalculator.boxHeight(2)
    }
}
```

We must calculate each box size **manually** using a convenience item!

Bento Box

Conclusion: consider all your gutters!

Qt Quick Layouts are extremely powerful!

But... Qt Quick Layouts calculate based on number of number of cells - 1
- *which is (almost) right*!

Qt Quick Layouts should calculate based on number of gutters = columns (or rows) - 1
- *which is correct!*

Please let Qt know if you want this fixed:
raise a feature request at account.qt.io!