

# Grid User Guide

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## 1 Square tiles

`rectSquareGrid r c` returns a rectangular grid with  $r$  rows and  $c$  columns, using square tiles. The indexing scheme is illustrated in Figure 1.

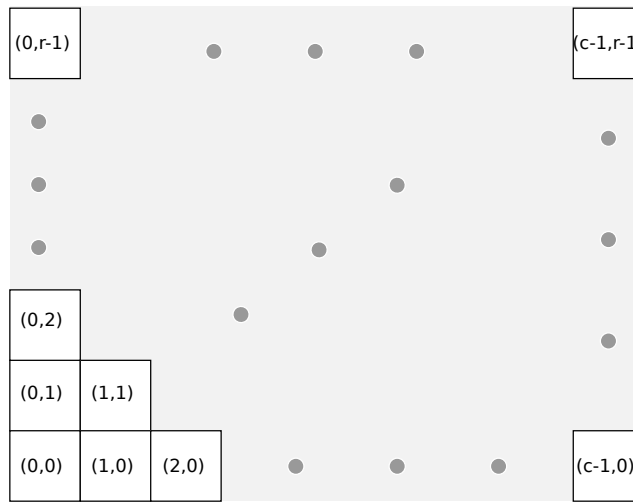


Figure 1: Grid generated by `rectSquareGrid`

`torSquareGrid r c` returns a toroidal grid with  $r$  rows and  $c$  columns, using square tiles. The indexing scheme is illustrated in Figure 1.

## 2 Triangular tiles

`triTriGrid s` returns a triangular grid with sides of length  $s$ , using triangular tiles. The indexing scheme is illustrated in Figure 2.

`paraTriGrid r c` returns a grid in the shape of a parallelogram with  $r$  rows and  $c$  columns, using triangular tiles. The indexing scheme is illustrated in Figure 2.

## 3 Hexagonal tiles

`hexHexGrid s` returns a grid of hexagonal shape, with sides of length  $s$ , using hexagonal tiles. The indexing scheme is illustrated in Figure 3.

`paraHexGrid r c` returns a grid in the shape of a parallelogram with  $r$  rows and  $c$  columns, using hexagonal tiles. The indexing scheme is illustrated in Figure 3.

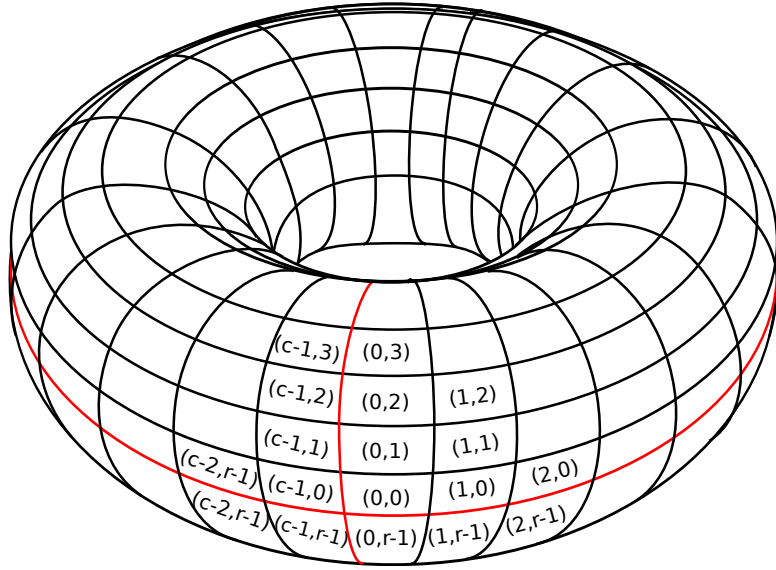


Figure 2: Grid generated by `torSquareGrid`

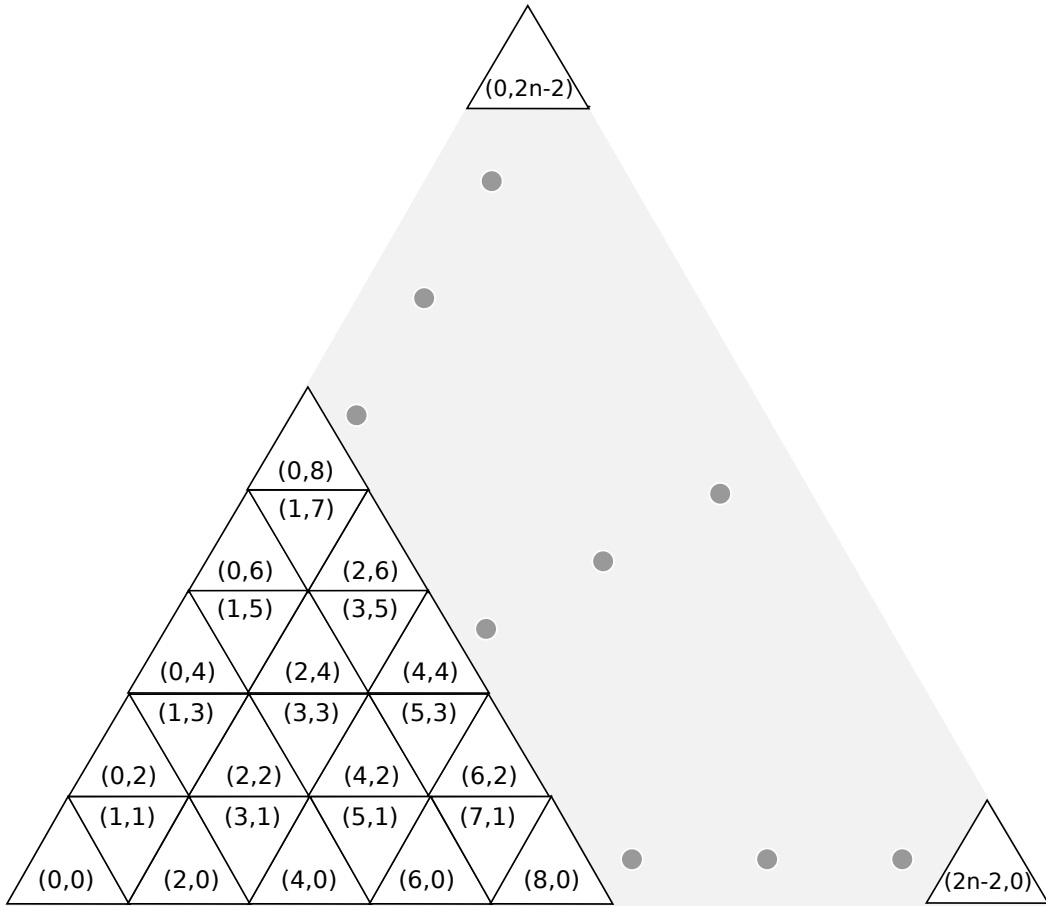


Figure 3: Grid generated by `triTriGrid`

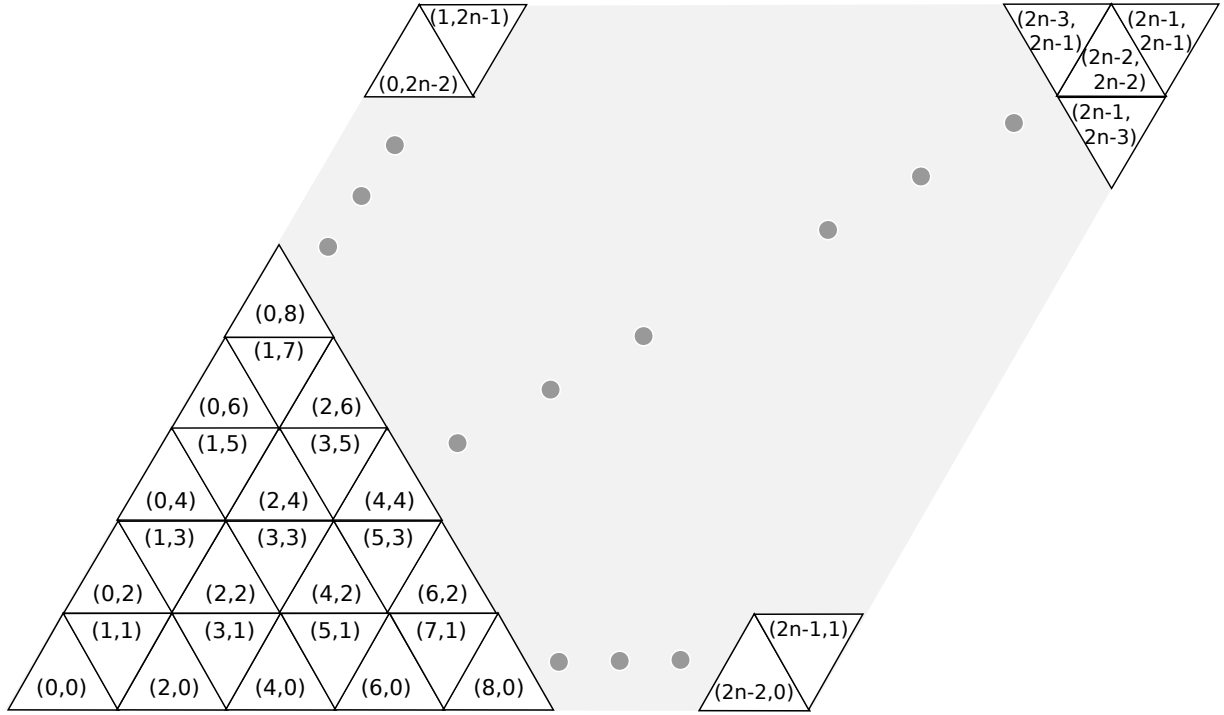


Figure 4: Grid generated by paraTriGrid

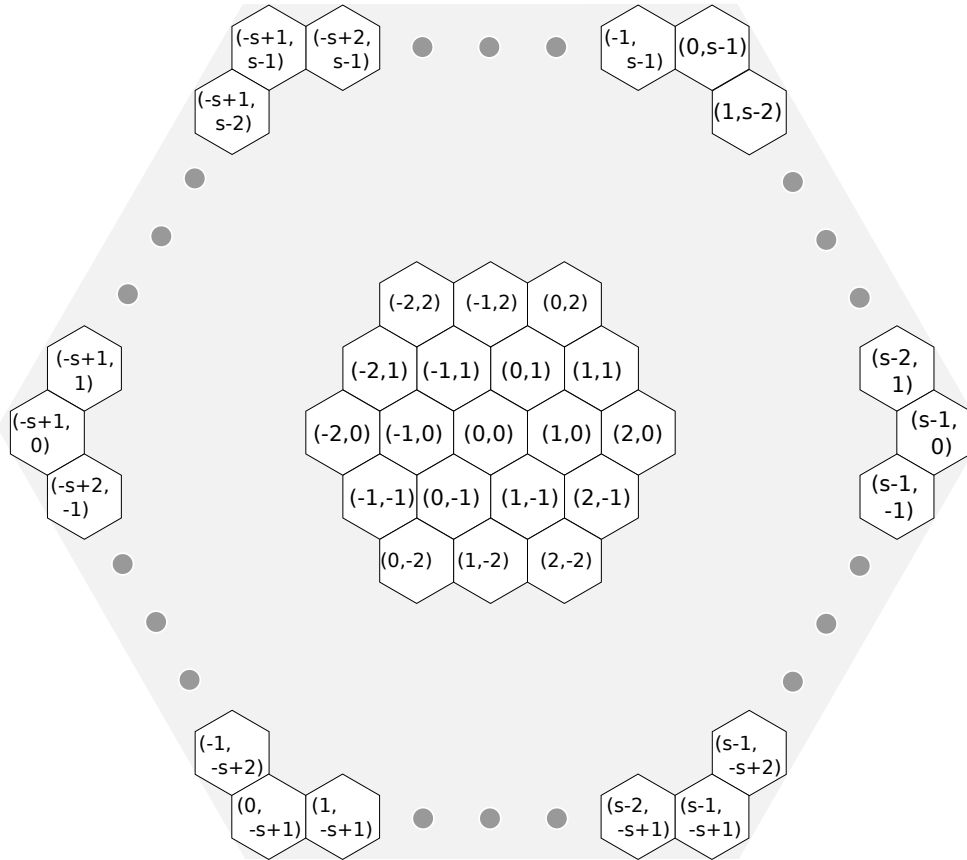


Figure 5: Grid generated by hexHexGrid

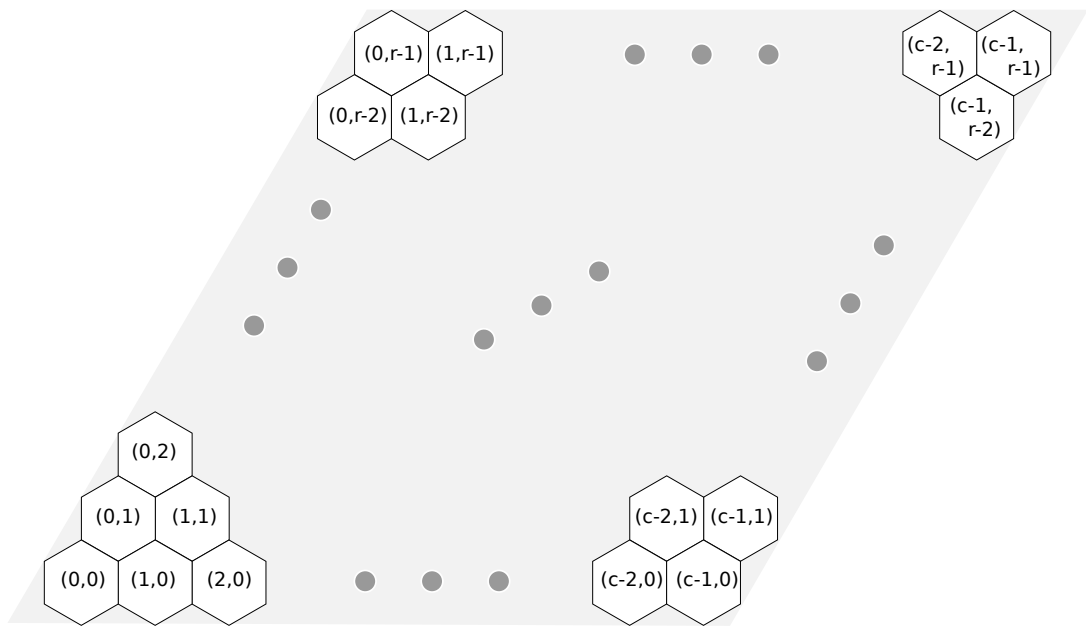


Figure 6: Grid generated by `paraHexGrid`