

Algorithm to select even/odd drawing method

1. Compute the expected diameter of the circle from the number of tiles to draw as:
 $\text{Sqrt}(4 * \text{tiles} / \pi)$ rounded to closest integer
2. If computed value is odd, draw an odd circle, if computed value is even, draw an even circle.

Algorithm to select next tile in the sequence

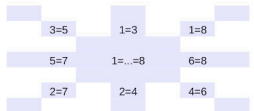
1. Compute $4x^2 + 4y^2$ values in the eighth of the plane where $y \geq 0, x \geq y$
2. Select the lowest value with free space for tiles
3. If several tiles have the same value, select the one closest to the top: highest y, then lowest x
4. After selecting a tile at position (x,y) in first quarter, select next distinct tiles found at symmetrical positions (-x,-y), (-x,y), (x,-y), (-y,x), (y,-x), (-y,-x), (y,x) in this order:



Special cases

Center: (x=0, y=0), 1=2=3=4=5=6=7=8

Axes: x=0, y=0, x=y, x=-y



EnsAD MEDEA (2014)

Algorithme pour agglomérer des carrés en formes circulaires