

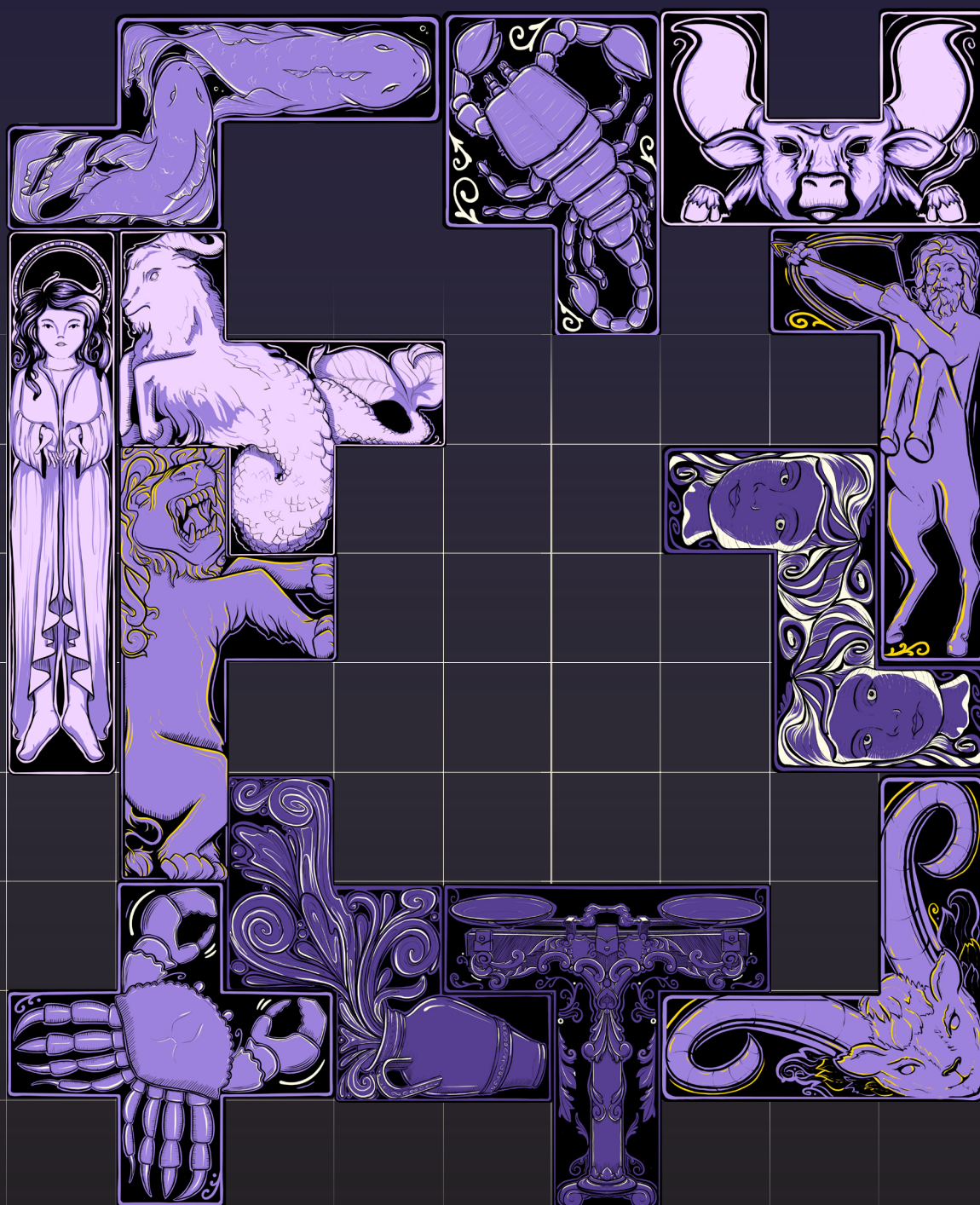
FENCE CHALLENGE



FENCE CHALLENGE

Goal

To enclose the biggest area possible by placing the pieces on a square grid forming a fence.

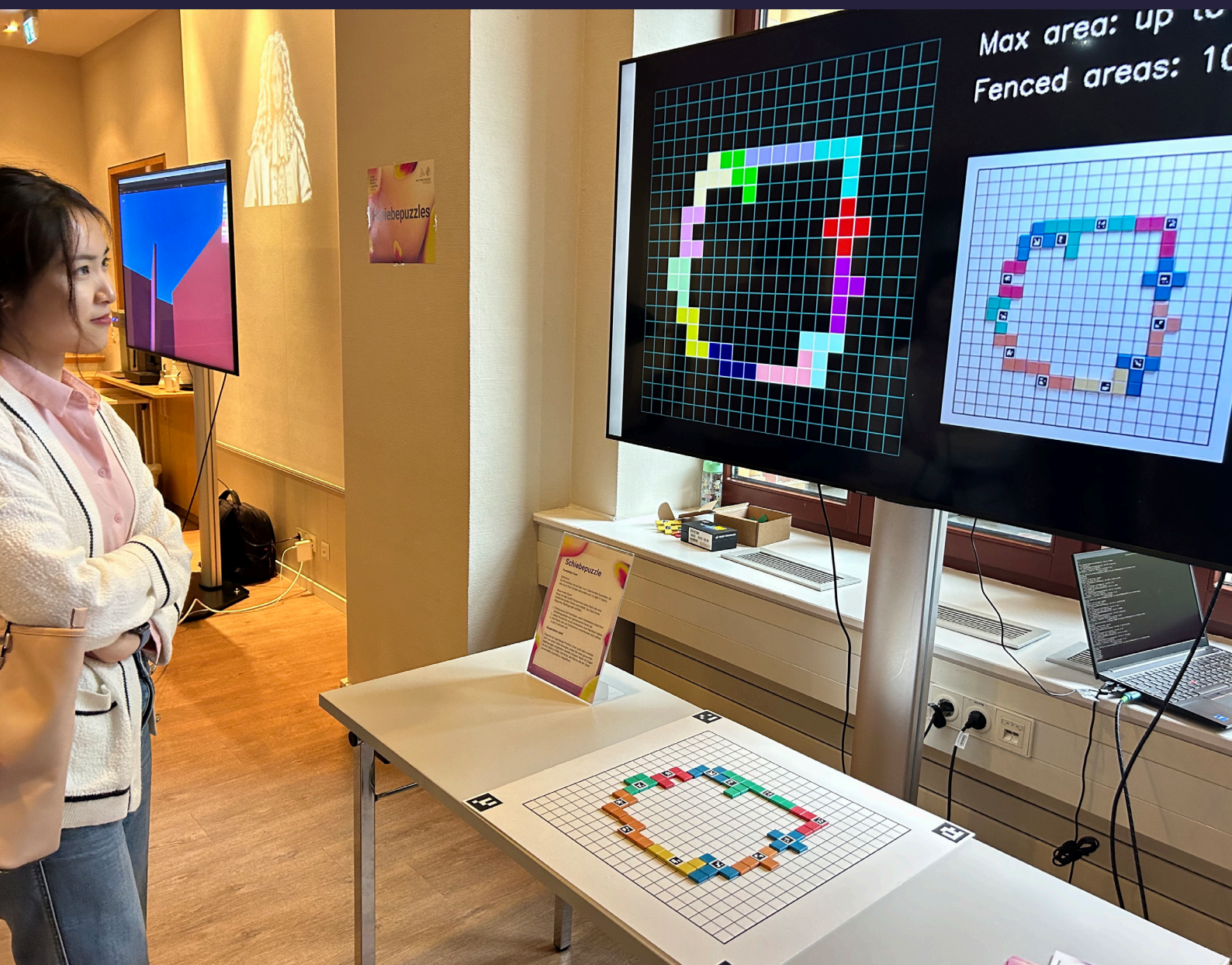


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2

Mixed Reality

We have developed an application that computes the area enclosed by a fence formed by a fixed configuration of pentominoes. This allows for participants to immediately get a feedback on their moves without having to count the area enclosed.

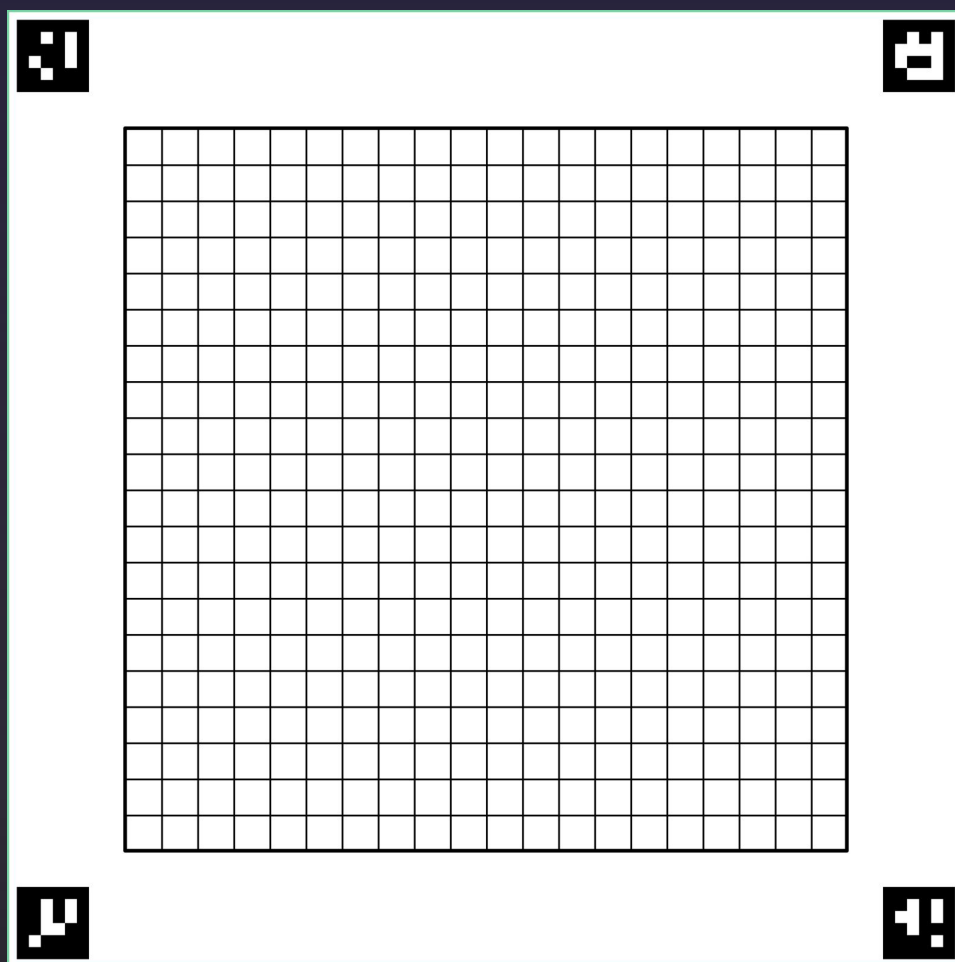


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3

The Game – Le Carré du Diable

The goal of the game is to collectively construct the biggest pentomino fence from a given starting position.

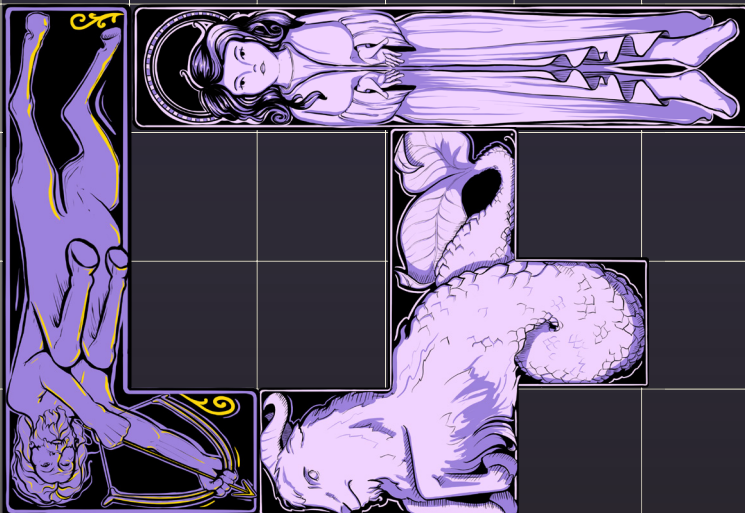


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Variants

Take a subset of the 12 pentominoes and enclose the biggest area possible with them. In the following table, we give the optimal area for fences using a subset of the 12 pentominoes.

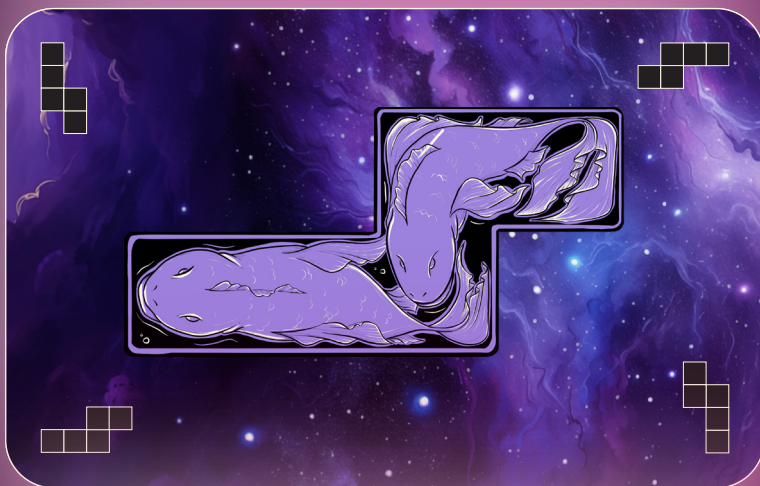
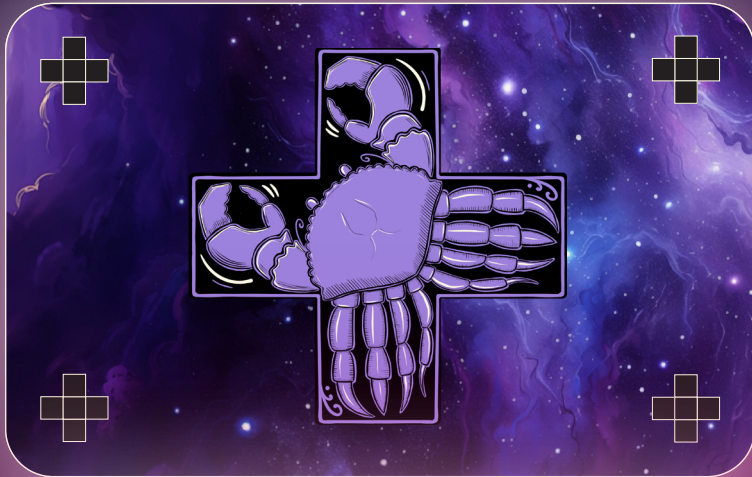
Pentominoes used	maximal area
FIL	4
FILN	11
FILNP	19
FILNPT	28
FILNPTU	39
FILNPTUV	54
FILNPTUVW	71
FILNPTUVWX	84
FILNPTUVWXY	106
FILNPTUVWXYZ	128



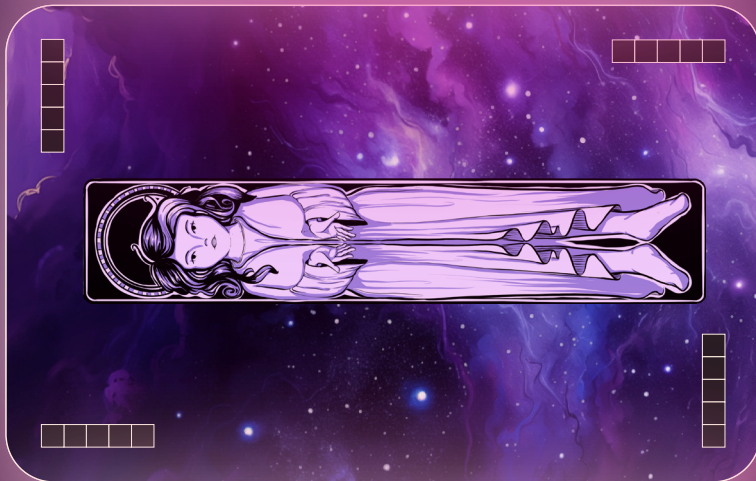
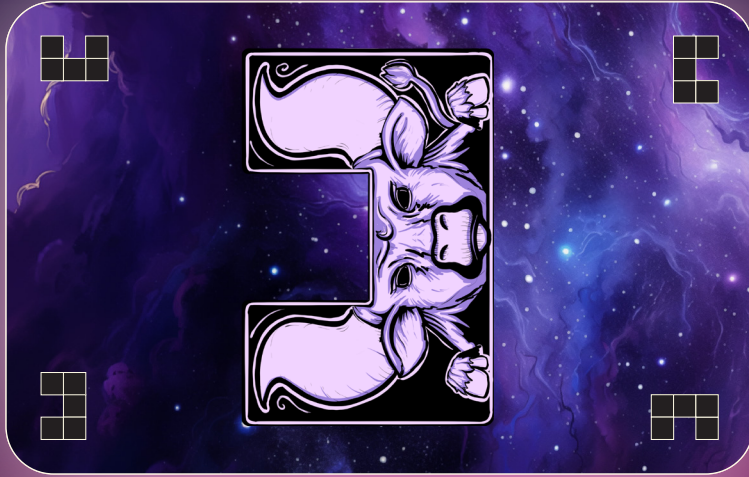
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9

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