6 Mosaics from Theorems

In this section we present the mosaics for the knots referenced in the theorems. We exclude mosaics from Theorem 4.2 as they were included in [4]. Mosaics that are marked with an $*$ are space-efficient mosaics that have more crossings than the crossing number of the knot they represent. Our images were created using a program that we wrote that takes the matrix representation of a mosaic and draws the mosaic using the Python PyCairo package.

6.1 Mosaics from Theorem 4.3

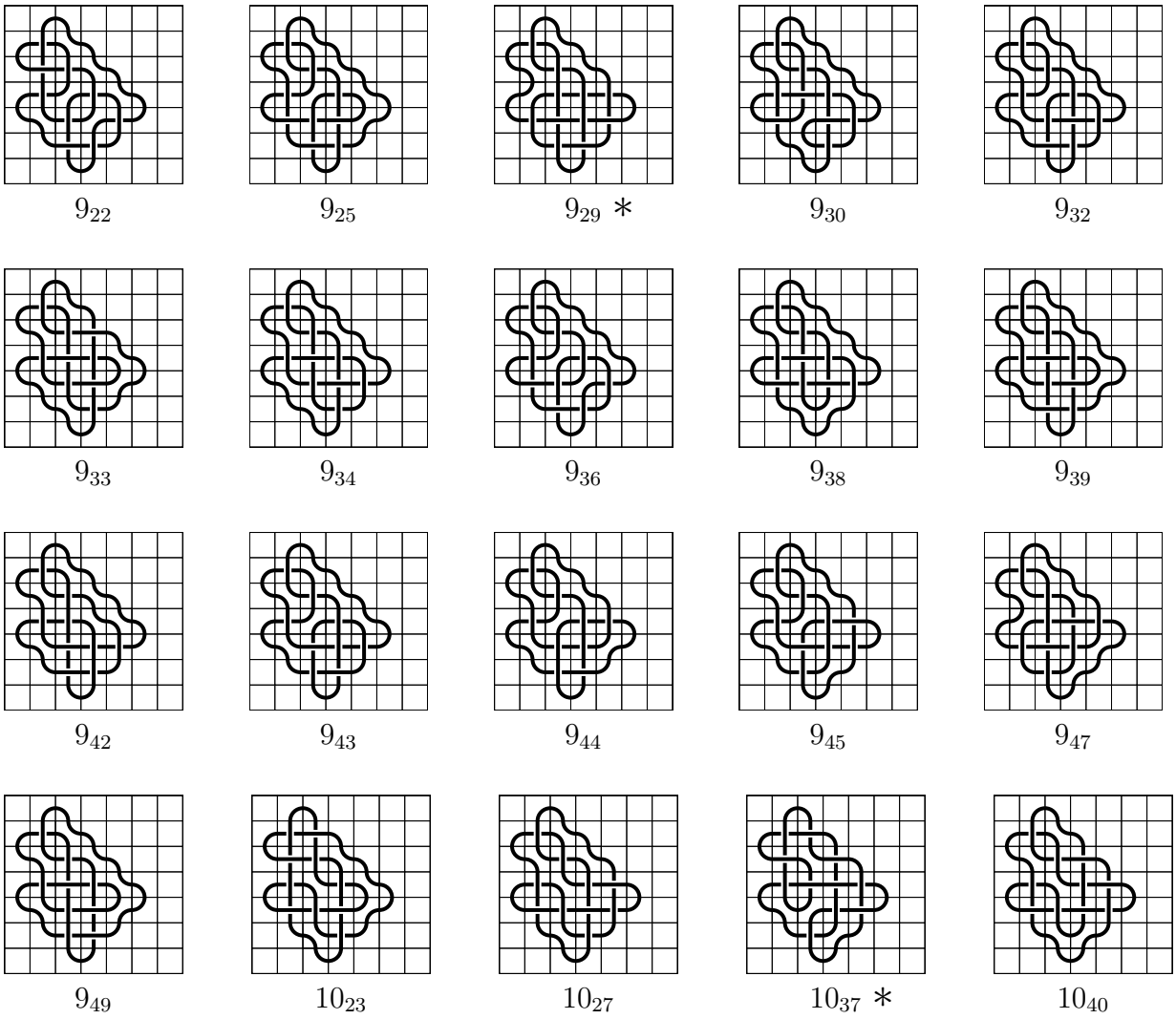


Figure 16: Knot mosaics from Theorem 4.3

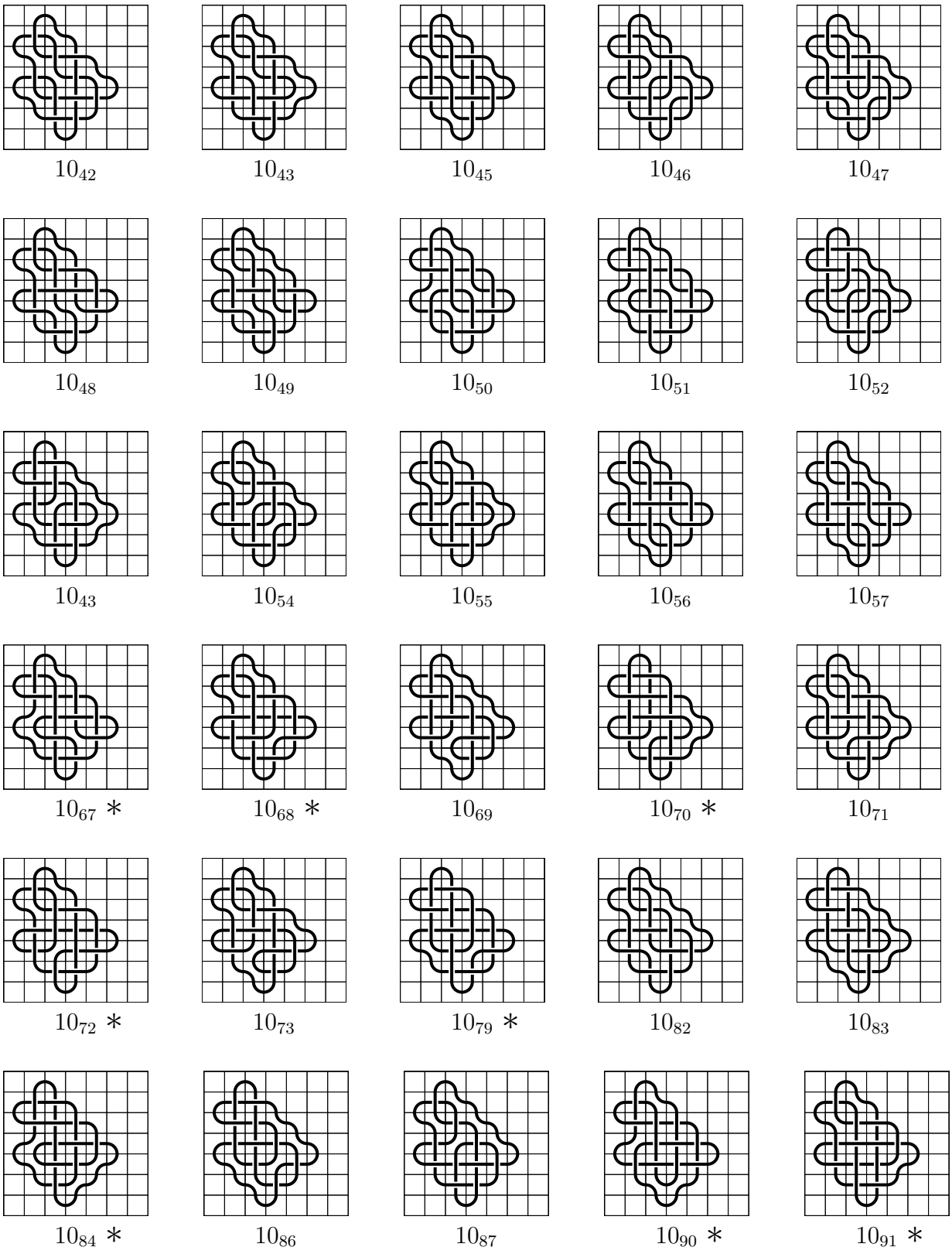


Figure 17: Continued mosaics from Theorem 4.3

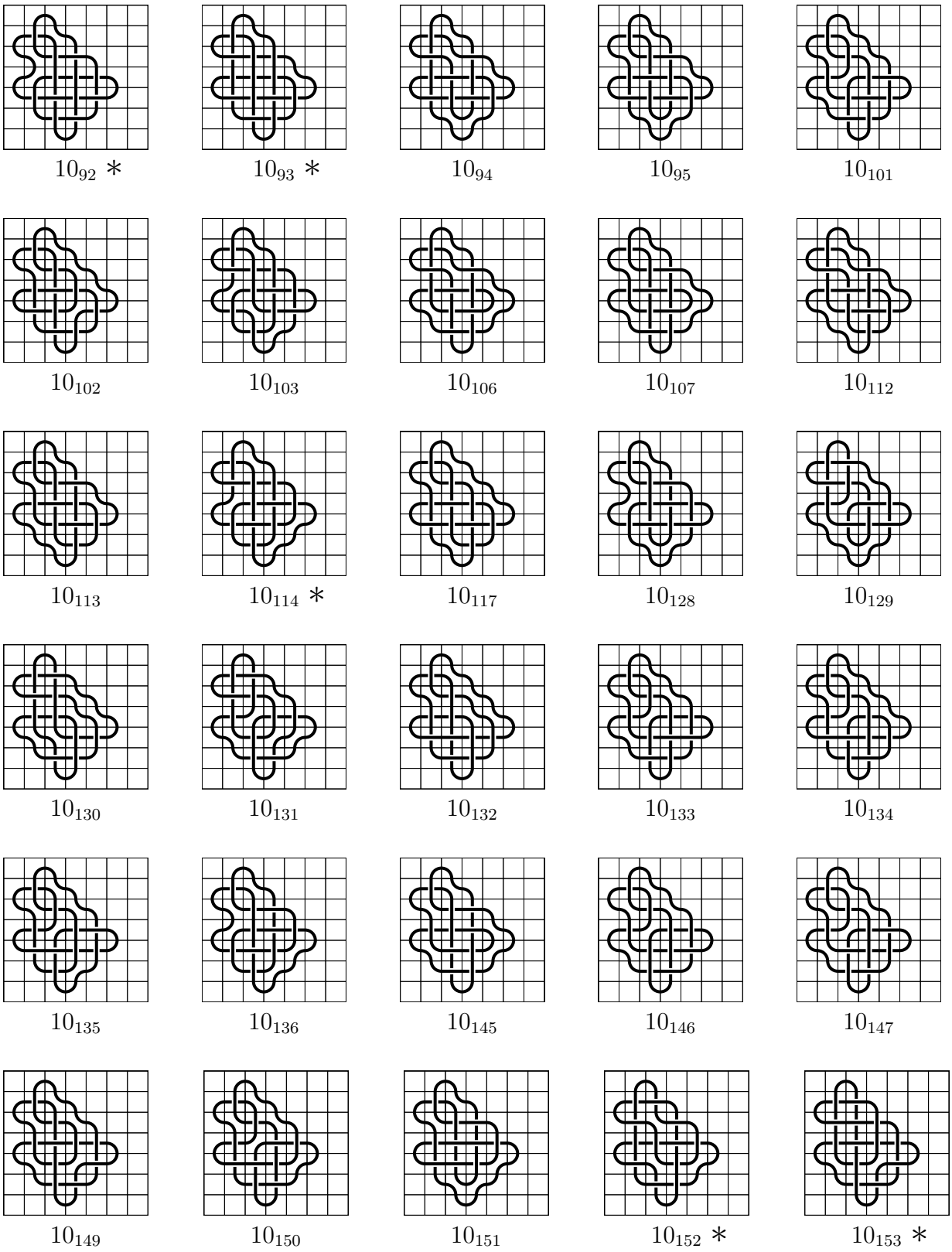
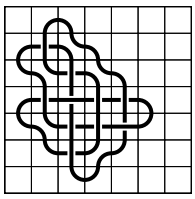
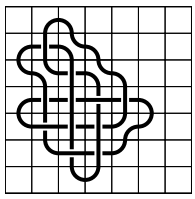
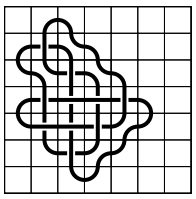
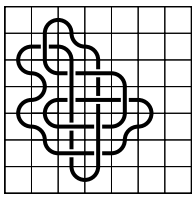


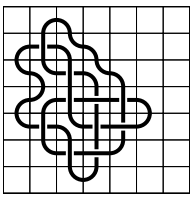
Figure 18: Mosaics from Theorem 4.3

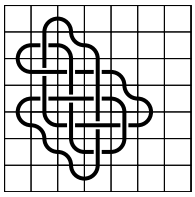

10_{156}


10_{158} *


10_{160}


10_{161}


10_{147}


10_{163} *

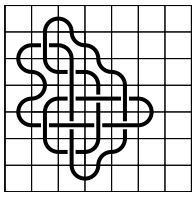
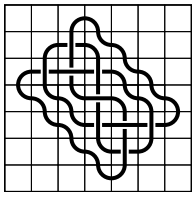
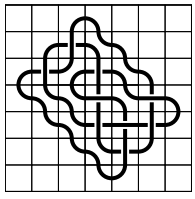
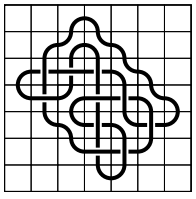

10_{164}

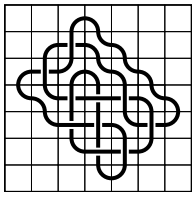
Figure 19: Continued mosaics from Theorem 4.3

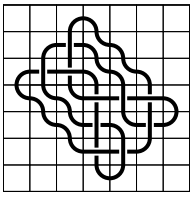
6.2 Mosaics from Theorem 4.4

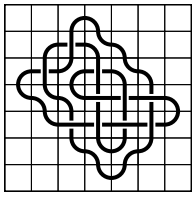

9_{40}

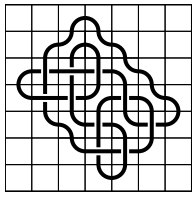

9_{41}

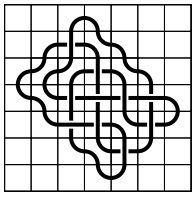

10_{58}

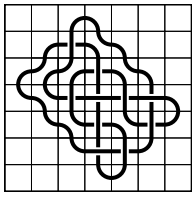

10_{59}

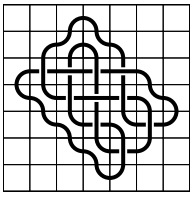

10_{60}

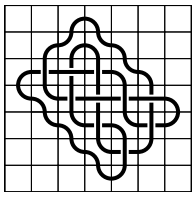

10_{80}

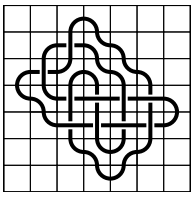

10_{81}

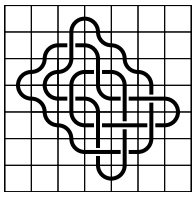

10_{88}

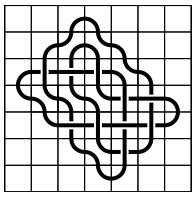

10_{89}


10_{96}


10_{97}


10_{98}


10_{99}


10_{104}

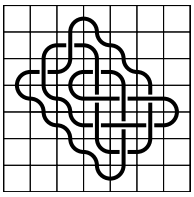

10_{105}

Figure 20: Mosaics from Theorem 4.4

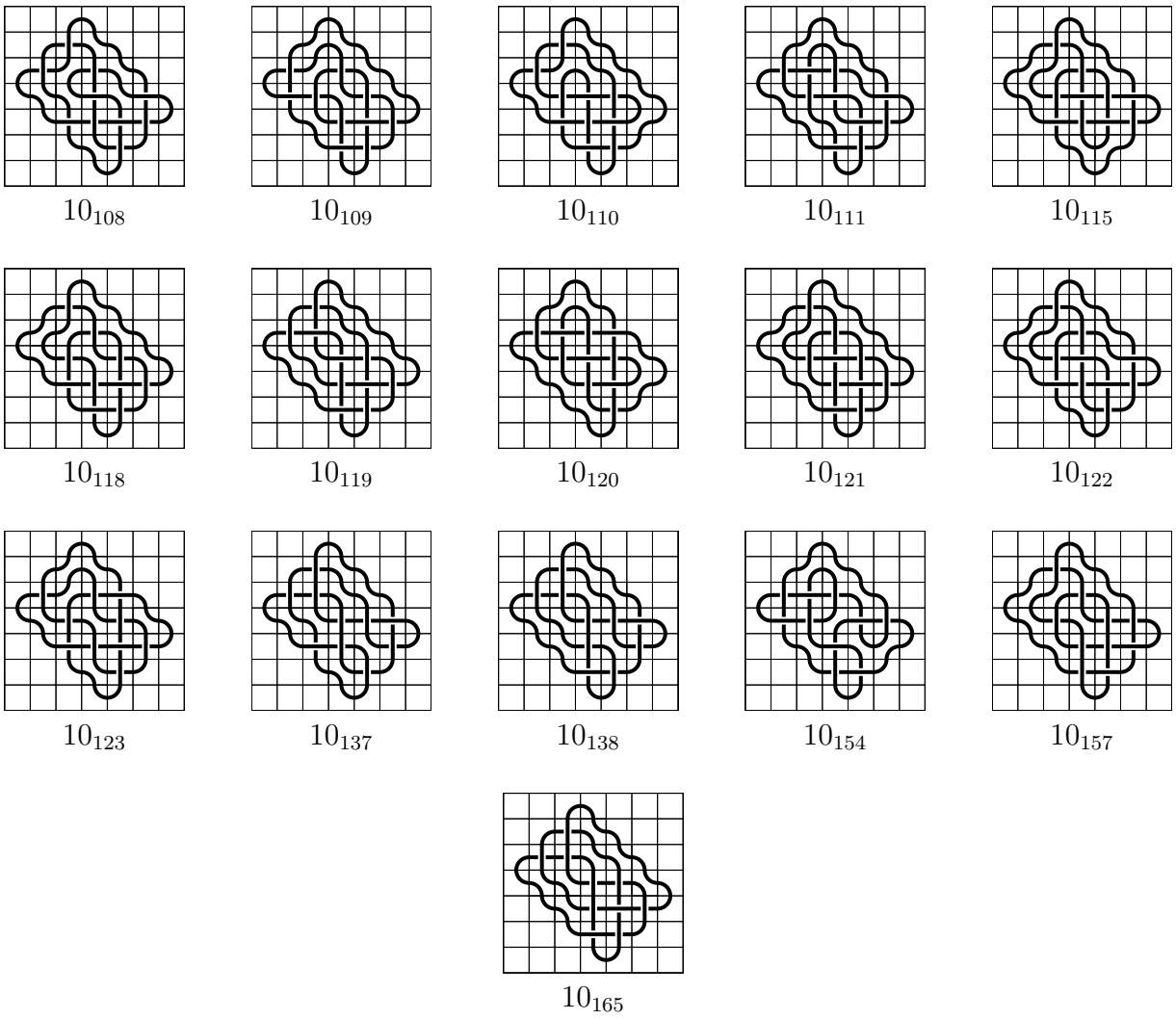
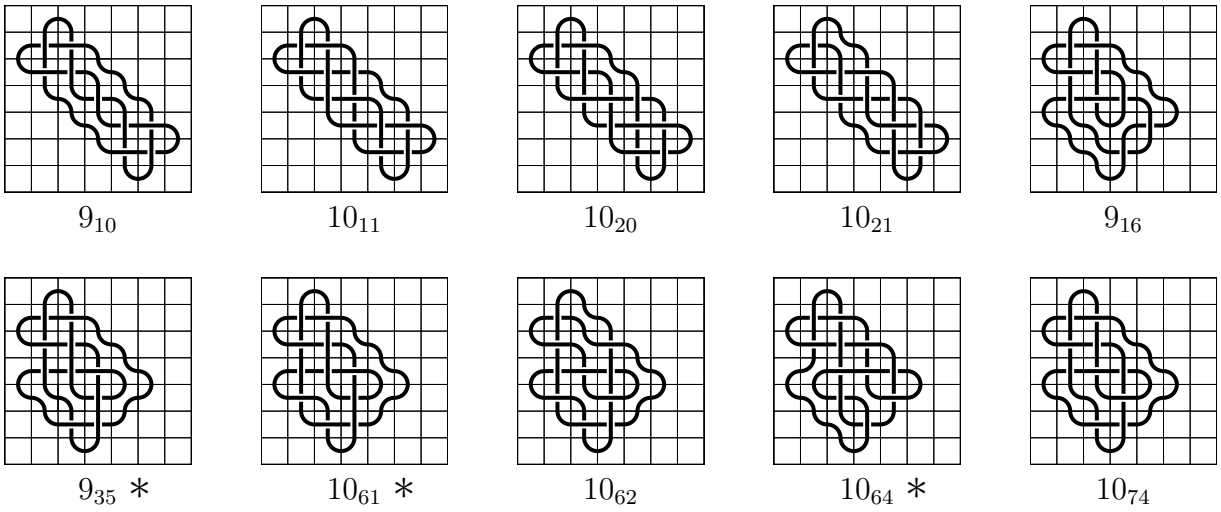
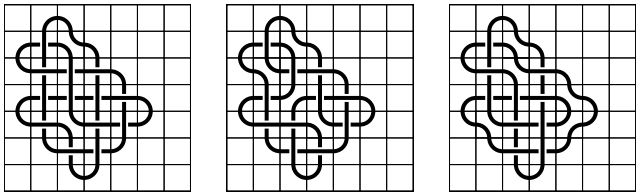


Figure 21: Continued mosaics from Theorem 4.4

6.3 Mosaics from Theorem 4.5

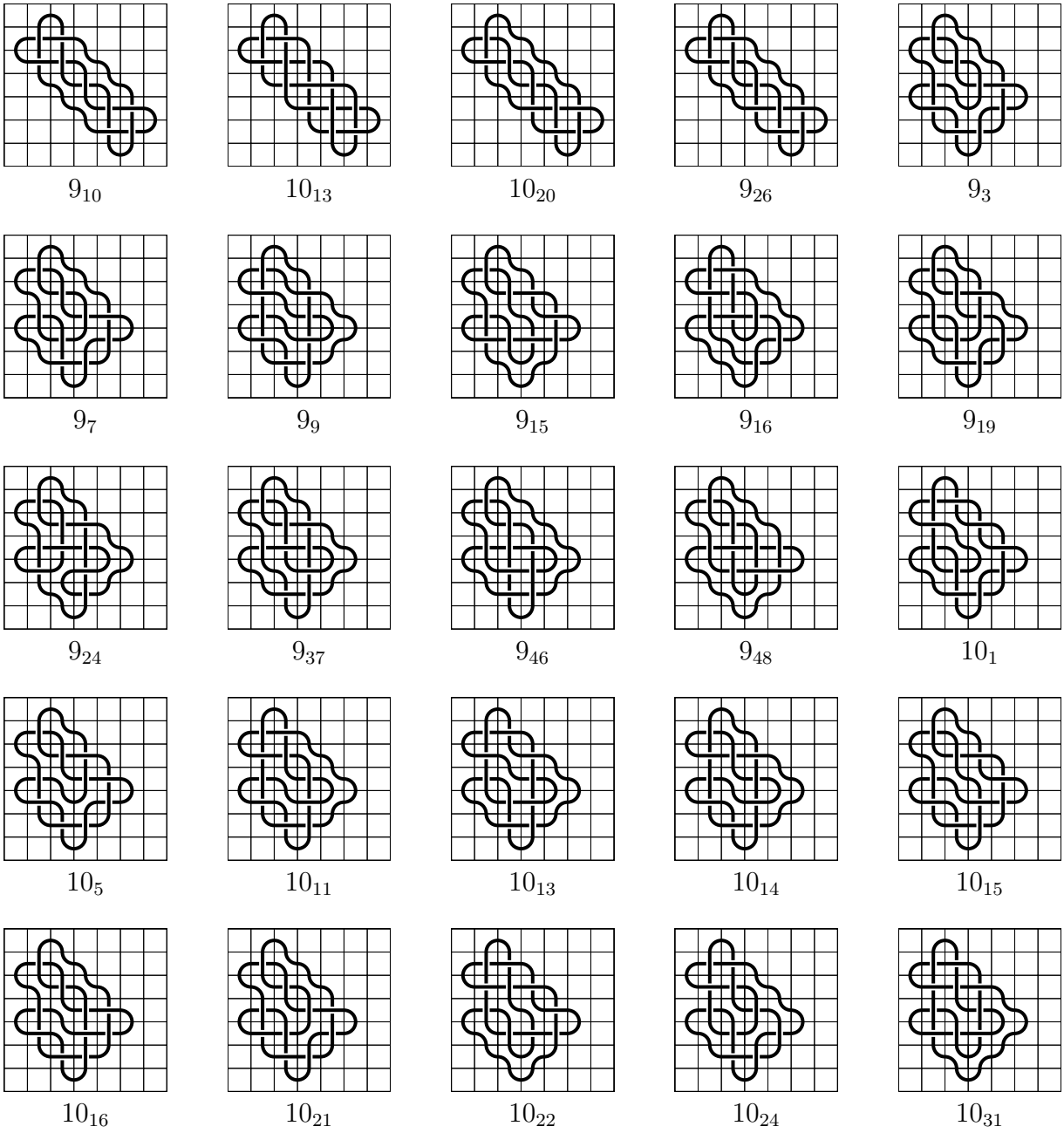




10_{76} * 10_{77} * 10_{139}

Figure 22: Mosaics from Theorem 4.5

6.4 Mosaics from Theorem 4.6



9_{10} 10_{13} 10_{20} 9_{26} 9_3

9_7 9_9 9_{15} 9_{16} 9_{19}

9_{24} 9_{37} 9_{46} 9_{48} 10_1

10_5 10_{11} 10_{13} 10_{14} 10_{15}

10_{16} 10_{21} 10_{22} 10_{24} 10_{31}

Figure 23: Mosaics from Theorem 4.6

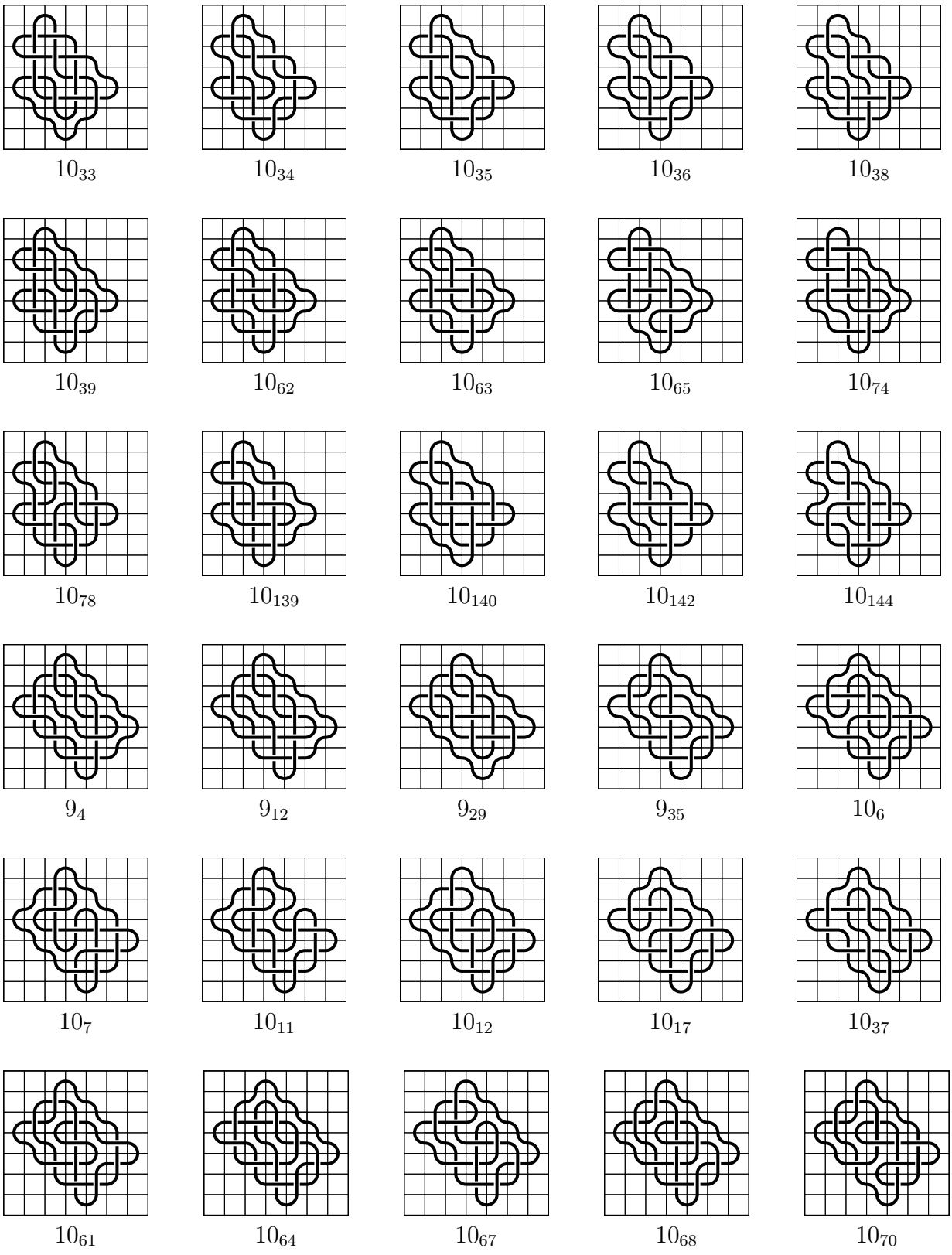


Figure 24: Continued mosaics from Theorem 4.6

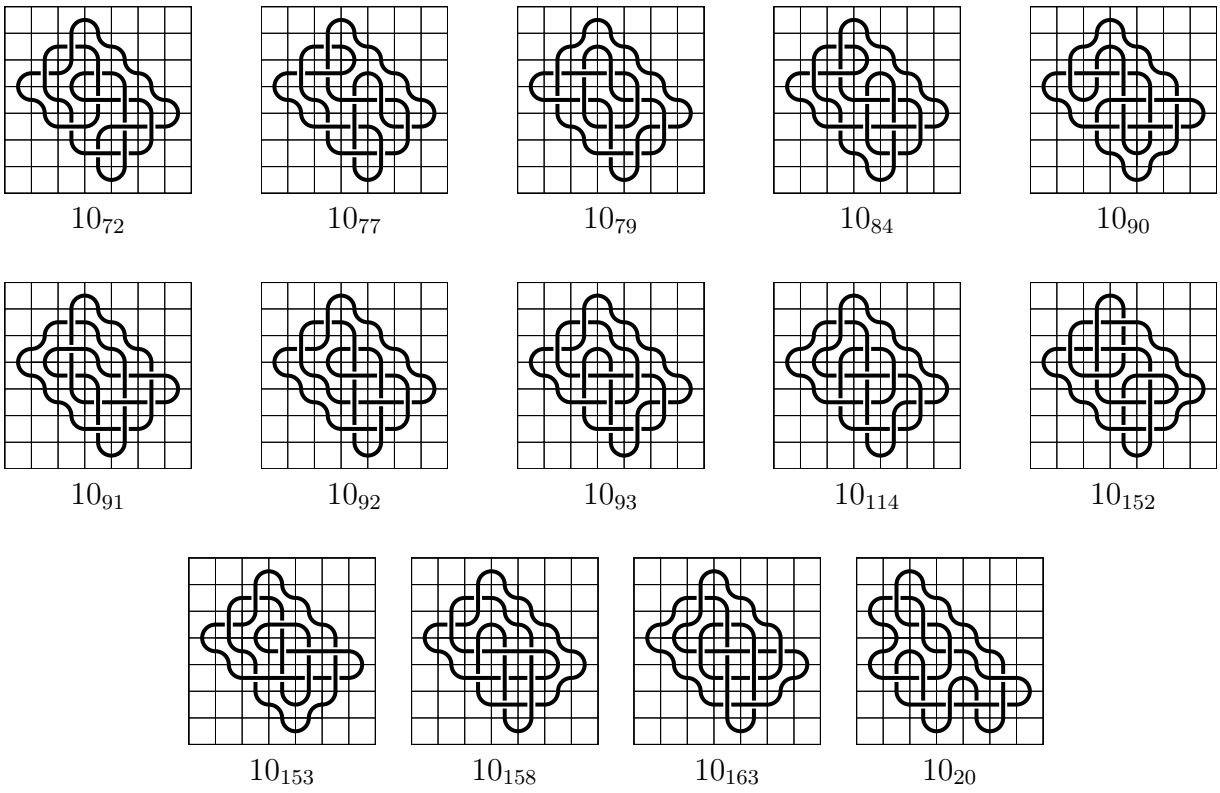


Figure 25: Continued mosaics from Theorem 4.6

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[1] Aaron Heap and Douglas Knowles. Space-efficient knot mosaics for prime knots with mosaic number 6. *Involve, a Journal of Mathematics*, 12(5):767–789, 2019.

[2] Hwa Jeong Lee, Lewis Ludwig, Joseph Paat, and Amanda Peiffer. Knot mosaic tabulation. *Involve, a Journal of Mathematics*, 11(1):13–26, 2017.

[3] Aaron Heap and Douglas Knowles. Tile number and space-efficient knot mosaics. *Journal of Knot Theory and Its Ramifications*, 27(06):1850041, 2018.

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[5] Gregory Vinal. Space-efficient knot mosaics of size 7. *Proceedings of GREAT Day*, 2019(1):13, 2020.

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