Notebook containing a minimum quick width permutation presentation diagram. It can also be found in MinQuickWidthPresentation.wl but graphic visuals can be found here.
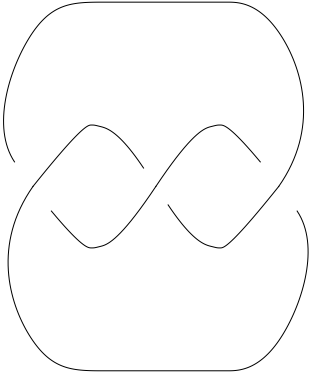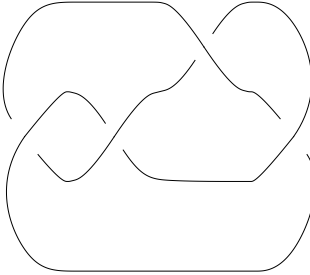
In[ ]:= **<< KnotTheory`MinimumQuickWidth`**
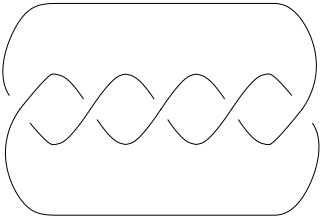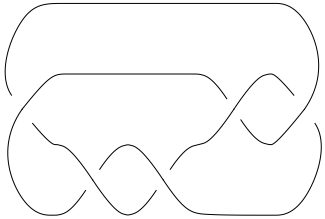
- The list of all knots in a minimum graphical/quick knot presentation:
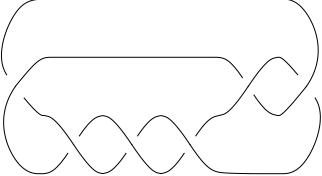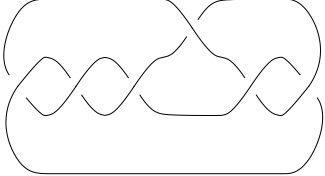
In[ ]:= **quantitiesGivenCrossingNum = ⟨|3 → 1,**
  4 → 1, 5 → 2, 6 → 3, 7 → 7, 8 → 21, 9 → 49, 10 → 165|⟩
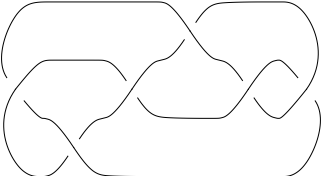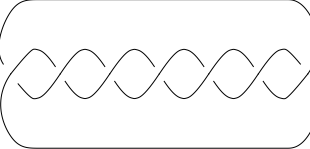
Out[ ]= ⟨| 3 → 1, 4 → 1, 5 → 2, 6 → 3, 7 → 7, 8 → 21, 9 → 49, 10 → 165 |⟩

Table[Knot[i, j] → Graphics[MinWidthDiagram[PD[Knot[i, j]]], ImageSize → 400],
 {i, 3, 10}, {j, 1, quantitiesGivenCrossingNum[i]}]

Out[ ]= {{Knot[3, 1] → }, {Knot[4, 1] → },

{Knot[5, 1] → , Knot[5, 2] → },

{Knot[6, 1] → , Knot[6, 2] → ,

Knot[6, 3] → }, {Knot[7, 1] → ,

Knot[7, 2] → , Knot[7, 3] → ,

Knot[7, 4] → , Knot[7, 5] → ,

Knot[7, 6] → , Knot[7, 7] → },

{Knot[8, 1] → , Knot[8, 2] → ,

Knot[8, 3] → , Knot[8, 4] → ,

Knot[8, 5] → , Knot[8, 6] → ,

Knot[8, 7] → , Knot[8, 8] → ,

Knot[8, 9] → , Knot[8, 10] → ,

Knot[8, 11] → , Knot[8, 12] → ,

Knot[8, 13] → , Knot[8, 14] → ,

Knot[8, 15] → , Knot[8, 16] → ,

Knot[8, 17] → , Knot[8, 18] → ,

Knot[8, 19] → , Knot[8, 20] → ,

Knot[8, 21] → }, {Knot[9, 1] → ,

Knot[9, 2] → , Knot[9, 3] → ,

Knot[9, 4] →　,　Knot[9, 5] →　,

Knot[9, 6] →　,　Knot[9, 7] →　,

Knot[9, 8] →　,　Knot[9, 9] →　,

Knot[9, 10] →　,　Knot[9, 11] →　,

Knot[9, 12] →　,　Knot[9, 13] →　,

Knot[9, 14] →　,　Knot[9, 15] →　,

Knot[9, 16] →　,　Knot[9, 17] →　,

Knot[9, 18] →　,　Knot[9, 19] →　,

Knot[9, 20] →　,　Knot[9, 21] →　,

Knot[9, 22] → , Knot[9, 23] → ,

Knot[9, 24] → , Knot[9, 25] → ,

Knot[9, 26] → , Knot[9, 27] → ,

Knot[9, 28] → , Knot[9, 29] → ,

Knot[9, 30] → , Knot[9, 31] → ,

Knot[9, 32] → , Knot[9, 33] → ,

Knot[9, 34] → , Knot[9, 35] → ,

Knot[9, 36] → , Knot[9, 37] → ,

Knot[9, 38] → , Knot[9, 39] → ,

Knot[9, 40] → , Knot[9, 41] → ,

Knot[9, 42] → , Knot[9, 43] → ,

Knot[9, 44] → , Knot[9, 45] → ,

Knot[9, 46] → , Knot[9, 47] → ,

Knot[9, 48] → , Knot[9, 49] → },

{Knot[10, 1] → , Knot[10, 2] → ,

Knot[10, 3] → , Knot[10, 4] → ,

Knot[10, 5] → , Knot[10, 6] → ,

Knot[10, 7] → , Knot[10, 8] → ,

Knot[10, 9] → , Knot[10, 10] → ,

Knot[10, 11] → , Knot[10, 12] → ,

Knot[10, 13] → , Knot[10, 14] → ,

Knot[10, 15] → , Knot[10, 16] → ,

Knot[10, 17] → , Knot[10, 18] → ,

Knot[10, 19] → , Knot[10, 20] → ,

Knot[10, 21] → , Knot[10, 22] → ,

Knot[10, 23] → , Knot[10, 24] → ,

Knot[10, 25] → , Knot[10, 26] → ,

Knot[10, 27] → , Knot[10, 28] → ,

Knot[10, 29] → , Knot[10, 30] → ,

Knot[10, 31] → , Knot[10, 32] → ,

Knot[10, 33] → , Knot[10, 34] → ,

Knot[10, 35] → , Knot[10, 36] → ,

Knot[10, 37] → , Knot[10, 38] → ,

Knot[10, 39] → , Knot[10, 40] → ,

Knot[10, 41] → , Knot[10, 42] → ,

Knot[10, 43] → , Knot[10, 44] → ,

Knot[10, 45] → , Knot[10, 46] → ,

Knot[10, 47] → , Knot[10, 48] → ,

Knot[10, 49] → , Knot[10, 50] → ,

Knot[10, 51] → , Knot[10, 52] → ,

Knot[10, 53] →

, Knot[10, 54] →

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Knot[10, 55] →

, Knot[10, 56] →

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Knot[10, 57] →

, Knot[10, 58] →

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Knot[10, 59] →

, Knot[10, 60] →

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Knot[10, 61] →

, Knot[10, 62] →

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Knot[10, 63] →

, Knot[10, 64] →

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Knot[10, 65] →

, Knot[10, 66] →

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Knot[10, 67] → , Knot[10, 68] → ,

Knot[10, 69] → , Knot[10, 70] → ,

Knot[10, 71] → , Knot[10, 72] → ,

Knot[10, 73] → , Knot[10, 74] → ,

Knot[10, 75] → , Knot[10, 76] → ,

Knot[10, 77] → , Knot[10, 78] → ,

Knot[10, 79] → , Knot[10, 80] → ,

Knot[10, 81] →

, Knot[10, 82] →

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Knot[10, 83] →

, Knot[10, 84] →

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Knot[10, 85] →

, Knot[10, 86] →

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Knot[10, 87] →

, Knot[10, 88] →

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Knot[10, 89] →

, Knot[10, 90] →

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Knot[10, 91] →

, Knot[10, 92] →

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Knot[10, 93] →

, Knot[10, 94] →

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Knot[10, 95] → , Knot[10, 96] → ,

Knot[10, 97] → , Knot[10, 98] → ,

Knot[10, 99] → , Knot[10, 100] → ,

Knot[10, 101] → , Knot[10, 102] → ,

Knot[10, 103] → , Knot[10, 104] → ,

Knot[10, 105] → , Knot[10, 106] → ,

Knot[10, 107] → , Knot[10, 108] → ,

Knot[10, 109] → , Knot[10, 110] → ,

Knot[10, 111] → , Knot[10, 112] → ,

Knot[10, 113] → , Knot[10, 114] → ,

Knot[10, 115] → , Knot[10, 116] → ,

Knot[10, 117] → , Knot[10, 118] → ,

Knot[10, 119] → , Knot[10, 120] → ,

Knot[10, 121] → , Knot[10, 122] → ,

Knot[10, 123] → , Knot[10, 124] → ,

Knot[10, 125] → , Knot[10, 126] → ,

Knot[10, 127] → , Knot[10, 128] → ,

Knot[10, 129] → , Knot[10, 130] → ,

Knot[10, 131] → , Knot[10, 132] → ,

Knot[10, 133] → , Knot[10, 134] → ,

Knot[10, 135] → , Knot[10, 136] → ,

Knot[10, 137] → , Knot[10, 138] → ,

Knot[10, 139] → , Knot[10, 140] → ,

Knot[10, 141] → , Knot[10, 142] → ,

Knot[10, 143] → , Knot[10, 144] → ,

Knot[10, 145] → , Knot[10, 146] → ,

Knot[10, 147] → , Knot[10, 148] → ,

Knot[10, 149] → , Knot[10, 150] → ,

Knot[10, 151] → , Knot[10, 152] → ,

Knot[10, 153] → , Knot[10, 154] → ,

Knot[10, 155] → , Knot[10, 156] → ,

Knot[10, 157] → , Knot[10, 158] → ,

Knot[10, 159] → , Knot[10, 160] → ,

Knot[10, 161] → , Knot[10, 162] → ,

Knot[10, 163] → , Knot[10, 164] → ,

Knot[10, 165] → }}