Classification of algebraic tangles – supplement 5/5

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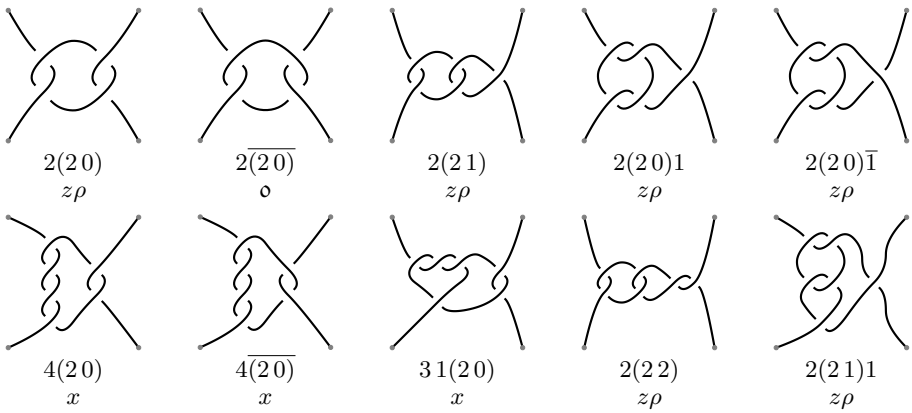
S5. Diagrams of tangles up to 10 crossings (with loops)

Symbols under the tangle name refer to its symmetry presented in Table 4.

Tangles 1 – 10 (with loops)



Tangles 11 – 73 (with loops)

$2(2\,0)2$ $z\rho$ | $2(2\,0)\overline{2}$ $z\rho$ | $2(2\,0)(2\,0)$ x | $2(2\,0)\overline{(2\,0)}$ x | $2(2\,0)1\,1$ $z\rho$ | $2\overline{(2\,0)}2$ $z\rho$ | $2(2\overline{(2\,0)}0)$ $z\rho$

$2(2(2\,0))$ $z\rho$ | $2(2\overline{(2\,0)})$ $z\rho$ | $4(2\,1)$ x | $4(2\,0)1$ z | $4(2\,0)\overline{1}$ z | $3\,1(2\,1)$ x | $3\,1(2\,0)1$ z

$3(2(2\,0))$ x | $3(2\overline{(2\,0)}0)$ $z\rho$ | $3(2\overline{(2\,0)})$ x | $2\,1\,2\overline{(2\,0)}$ x | $2\,1(2\overline{(2\,0)}0)$ $z\rho$ | $2\overline{(4\,0)}1$ z | $2(3(2\,0))$ $z\rho$

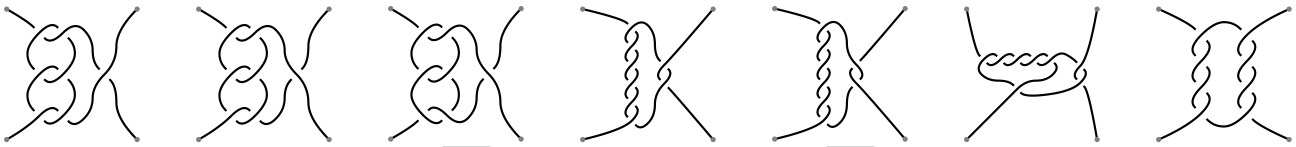
$2(3\overline{(2\,0)})$ $z\rho$ | $2(2\,3)$ $z\rho$ | $2(2\,2)1$ $z\rho$ | $2(2\,1\,2\,0)$ x | $2(2\,1\,1\,1\,0)$ x | $2(2\,1(2\,0))$ $z\rho$ | $2(2\,1\overline{(2\,0)})$ $z\rho$

$2(2\,1)2$ $z\rho$ | $2(2\,1)(2\,0)$ x | $2(2\,1)\overline{(2\,0)}$ x | $2(2\,0)3$ $z\rho$ | $2(2\,0)2\,1$ $z\rho$ | $2(2\,0)\overline{3}$ $z\rho$ | $2(2\,0)(3\,0)$ x

$2(2\,0)\overline{(2\,1\,0)}$ x | $2(2\,0)(2\,1\,0)$ x | $2(2\,0)\overline{(3\,0)}$ x | $2(2\,0)(2\,1)$ x | $2(2\,0)(2\,0)1$ z | $2(2\,0)(2\,0)\overline{1}$ z | $2(2\,0)\overline{(2\,1)}$ x

$2(2\,0)\overline{(2\,0)1}$ z | $2(2\,1)1\,1$ $z\rho$ | $2(2\,0)1\,2$ $z\rho$ | $2(2\,0)1\,1\,1$ $z\rho$ | $2(2\,0)1(2\,0)$ x | $\overline{2(2\,0)}2\,1$ $z\rho$ | $2\overline{(2\,0)}3$ $z\rho$

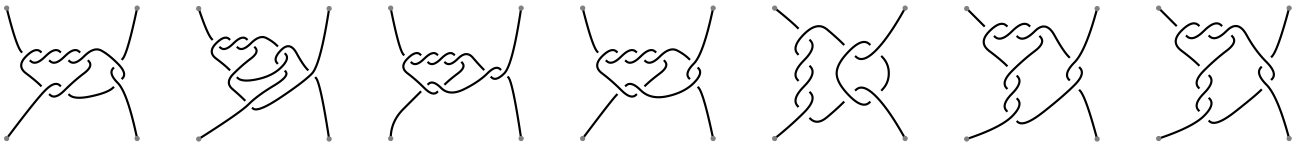
$2\overline{(2\,0)}2\,1$ $z\rho$ | $2(2(2\,1\,0))$ x | $2(2\overline{(3\,0)})$ x | $2(2\overline{(2\,0)}1)$ $z\rho$ | $2(2\overline{(2\,0)}0)1$ $z\rho$ | $2(2\overline{(2\,0)}0)\overline{1}$ $\mathbf{1}$ | $2(2(2\,1))$ $z\rho$



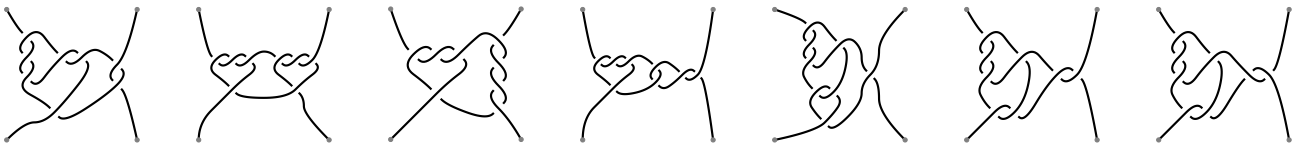
$2(2(2\,0))1$ $z\rho$ | $2(2(2\,0))\overline{1}$ $z\rho$ | $2(2\overline{(2\,0)})\overline{1}$ $\mathbf{1}$ | $6(2\,0)$ x | $6\overline{(2\,0)}$ x | $5\,1(2\,0)$ x | $4(4\,0)$ $z\rho$

Tangles 74 – 136 (with loops)

$4(3\,1\,0)$	$4(\overline{4\,0})$	$4(2\,2)$	$4(2\,1)1$	$4(2\,0)2$	$4(2\,0)\overline{2}$	$4(2\,0)(2\,0)$
x	$\overline{zx}$	x	z	y	y	e



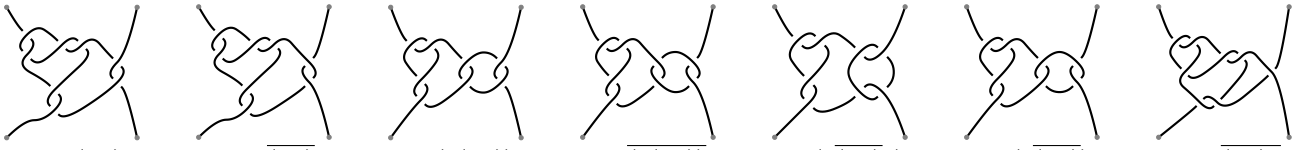
$4(2\,0)\overline{(2\,0)}$	$3\,1(2\,0)1\,1$	$4\overline{(2\,0)}2$	$4\overline{(2\,0)}(2\,0)$	$4(2\overline{(2\,0)}0)$	$3\,3(2\,0)$	$3\,3\overline{(2\,0)}$
e	y	y	e	$z\rho$	x	x



$3\,2\,1(2\,0)$	$3\,1(3\,1\,0)$	$3\,1\overline{(4\,0)}$	$3\,1(2\,2)$	$3\,1(2\,1)1$	$3\,1(2\,0)2$	$3\,1(2\,0)\overline{2}$
x	$z\rho$	$z\rho$	x	z	y	y

$3\,1(2\,0)(2\,0)$	$3\,1(2\,0)\overline{(2\,0)}$	$4(2\,0)1\,1$	$3\,1(2\overline{(2\,0)}0)$	$3(3\,0)(2\,0)$	$3(3\,0)\overline{(2\,0)}$	$3\overline{(3\,0)}(2\,0)$
e	e	y	$z\rho$	x	x	e

$3(2(2\,1))$	$3(2(2\,0))1$	$3(2(2\,0))\overline{1}$	$3(2\overline{(2\,0)}1)$	$3(2\overline{(2\,0)}0)1$	$3(2\overline{(2\,0)}0)\overline{1}$	$3(2\overline{(2\,0)})\overline{1}$
x	z	z	$z\rho$	$z\rho$	$z\rho$	z



$2\,2\,2(2\,0)$	$2\,2\,2\overline{(2\,0)}$	$2\,2(2(2\,0))$	$2\,2\overline{(2(2\,0))}$	$2\,2(2\overline{(2\,0)}0)$	$2\,2(2\overline{(2\,0)})$	$2\,1\,2\overline{(2\,0)}1$
x	x	x	x	$z\rho$	x	z

$2\,1\,1(2\overline{(2\,0)}0)$	$2\,1(2\,1\,0)(2\,0)$	$2\,1(2\,1\,0)\overline{(2\,0)}$	$2\,1(2\overline{(2\,0)}1)$	$2\,1(2\overline{(2\,0)}0)1$	$2\overline{(4\,0)}2$	$2\overline{(4\,0)}(2\,0)$
$z\rho$	x	x	$z\rho$	$z\rho$	y	e

$2(3(2\,1))$	$2(3(2\,0))1$	$2(3(2\,0))\overline{1}$	$2(3\overline{(2\,0)})\overline{1}$	$2(2\,4)$	$2(2\,3)1$	$2(2\,2\,1\,1\,0)$
$z\rho$	$z\rho$	$z\rho$	$z\rho$	$z\rho$	$z\rho$	x

$2(2\,2(2\,0))$	$2(2\,2\overline{(2\,0)})$	$2(2\,2)2$	$2(2\,2)(2\,0)$	$2(2\,2)\overline{(2\,0)}$	$2(2\,1\,2\,1)$	$2(2\,1\,2\,0)1$
$z\rho$	$z\rho$	$z\rho$	x	x	x	z

Tangles 137 – 199 (with loops)

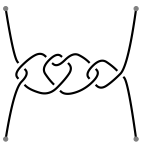
$2(2\,1\,2\,0)\overline{1}$
z

$2(2\,1\,1\,1\,1)$
x

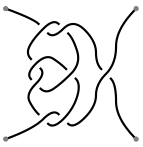
$2(2\,1\,1\,1\,0)1$
z

$2(2\,1\,1(2\,0))$
$z\rho$

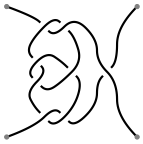
$2(2\,1\,1\overline{(2\,0)})$
$z\rho$



$2(2\,1(2\,1))$
$z\rho$



$2(2\,1(2\,0))1$
$z\rho$



$2(2\,1(2\,0))\overline{1}$
$z\rho$

$2(2\,1)3$
$z\rho$

$2(2\,1)2\,1$
$z\rho$

$2(2\,1)(3\,0)$
x

$2(2\,1)\overline{(2\,1\,0)}$
x

$2(2\,1)(2\,1\,0)$
x

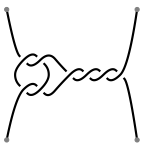
$2(2\,1)\overline{(3\,0)}$
x

$2(2\,1)(2\,1)$
x

$2(2\,1)(2\,0)1$
z

$2(2\,1)(2\,0)\overline{1}$
z

$2(2\,1)\overline{(2\,0)1}$
z

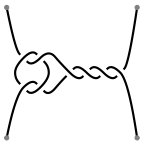


$2(2\,0)4$
$z\rho$

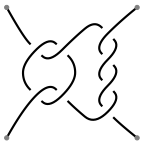
$2(2\,0)3\,1$
$z\rho$

$2(2\,0)2\,2$
$z\rho$

$2(2\,0)2\,1\,1$
$z\rho$



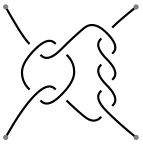
$2(2\,0)\overline{4}$
$z\rho$



$2(2\,0)(4\,0)$
x

$2(2\,0)\overline{(3\,1\,0)}$
x

$2(2\,0)(3\,1\,0)$
x

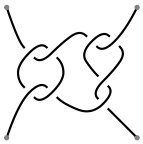


$2(2\,0)\overline{(4\,0)}$
x

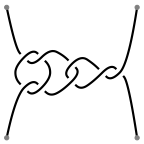
$2(2\,0)(3\,1)$
x

$2(2\,0)(3\,0)1$
z

$2(2\,0)(3\,0)\overline{1}$
z



$2(2\,0)(2\,2\,0)$
x



$2(2\,0)(2\,2)$
x

$2(2\,0)(2\,1\,1\,0)$
x

$2(2\,0)\overline{(2\,2\,0)}$
x

$2(2\,0)(2\,1\,1)$
x

$2(2\,0)(2\,1\,0)1$
z

$2(2\,0)\overline{(3\,1)}$
x

$2(2\,0)\overline{(3\,0)}1$
z

$2(2\,0)\overline{(3\,0)1}$
z

$2(2\,0)(2\,1)1$
z

$2(2\,0)(2\,0)2$
y

$2(2\,0)(2\,0)\overline{2}$
y

$2(2\,0)(2\,0)(2\,0)$
e

$2(2\,0)(2\,0)\overline{(2\,0)}$
e

$2(2\,0)\overline{(2\,2)}$
x

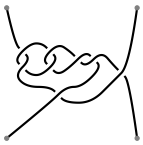
$\overline{2(2\,0)}(2\,0)1\,1$
y

$2(2\,0)\overline{(2\,0)}2$
y

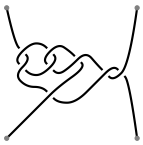
$2(2\,0)\overline{(2\,0)2}$
y

$2(2\,0)\overline{(2\,0)}(2\,0)$
e

$2(2\,0)\overline{(2\,0)(2\,0)}$
e



$2(2\,2)1\,1$
$z\rho$



$2(2\,1)1\,2$
$z\rho$

$2(2\,1)1\,1\,1$
$z\rho$

$2(2\,1)1(2\,0)$
x

$2(2\,0)1\,3$
$z\rho$

$2(2\,0)1\,2\,1$
$z\rho$

$2(2\,0)1\,1\,2$
$z\rho$

$2(2\,0)1\,1\,1\,1$
$z\rho$

$2(2\,0)1(3\,0)$
x

$2(2\,0)1(2\,1)$
x

$2(2\,0)1(2\,1\,0)$
x

$2(2\,0)1(2\,0)1$
z

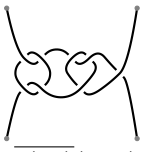
$\overline{2(2\,0)}2\,2$
$z\rho$

Tangles 200 – 262 (with loops)

$\overline{2(20)}211$
$z\rho$

$2(20)\overline{31}$
$z\rho$

$\overline{2(20)}(2110)$
x

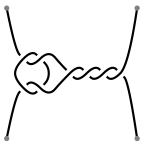


$\overline{2(20)}(211)$
x

$\overline{2(20)}(210)1$
z

$\overline{2(20)}(21)1$
z

$2(20)(20)11$
y

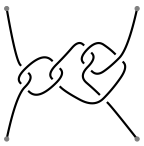


$2\overline{(20)}4$
$z\rho$

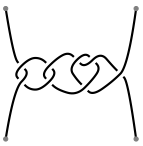
$2\overline{(20)}31$
$z\rho$

$2\overline{(20)}22$
$z\rho$

$2\overline{(20)}211$
$z\rho$



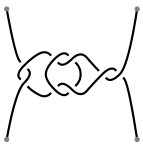
$2(2(2110))$
x



$2(2(211))$
x

$2(2(210))1$
z

$2(2\overline{(30)})1$
z



$2(2\overline{(20)}2)$
$z\rho$

$2(2\overline{(20)}1)1$
$z\rho$

$2(2\overline{(20)}0)2$
$z\rho$

$2(2\overline{(20)}0)\overline{2}$
$z\rho$

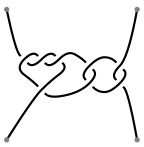
$2(2\overline{(20)}0)(20)$
x

$2(2\overline{(20)}0)\overline{(20)}$
x

$2(2\overline{(20)}0)11$
$z\rho$

$4(2(20))$
x

$4(2\overline{(20)})$
x



$31(2(20))$
x

$2(4(20))$
$z\rho$

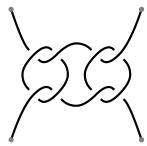
$2(4\overline{(20)})$
$z\rho$

$2(31(20))$
$z\rho$

$2(31\overline{(20)})$
$z\rho$

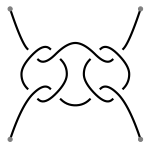
$2(20)2(20)$
x

$2(20)2\overline{(20)}$
x



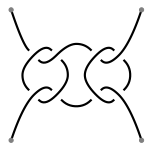
$2(20)(2(20)0)$
$z\rho$

$2(20)(2(20))$
x



$2(20)\overline{(2(20)0)}$
$\overline{zx}$

$2(20)\overline{(2(20))}$
x



$2(20)(2\overline{(20)}0)$
$z\rho$

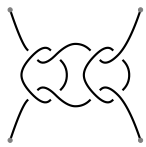
$2(20)(2\overline{(20)})$
x

$2(20)11(20)$
x

$\overline{2(20)}2(20)$
x

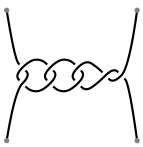
$\overline{2(20)}2(20)$
x

$\overline{2(20)}2\overline{(20)}$
x

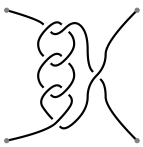


$\overline{2(20)}(2\overline{(20)}0)$
$\circ$

$2(2\overline{(40)})$
x



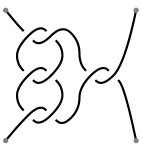
$2(2(22))$
$z\rho$



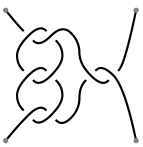
$2(2(21))1$
$z\rho$

$2(2(20)(20))$
$z\rho$

$2(20)\overline{(20)})$
$z\rho$



$2(2(20))2$
$z\rho$

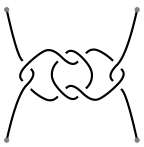


$2(2(20))\overline{2}$
$z\rho$

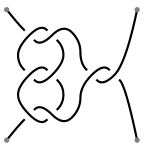
$2(2(20))(20)$
x

$2(2(20))\overline{(20)}$
x

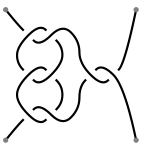
$2(2(20))11$
$z\rho$



$2(\overline{2(20)}(20))$
$z\rho$

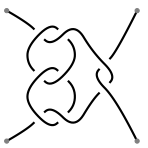


$2(2\overline{(20)})2$
$z\rho$

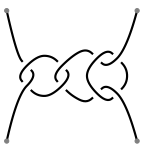


$2(2\overline{(20)})\overline{2}$
$z\rho$

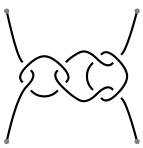
$2(2\overline{(20)})(20)$
x



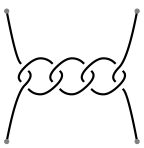
$2(2\overline{(20)})\overline{(20)}$
x



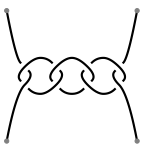
$2(2(2\overline{(20)}0))$
$z\rho$



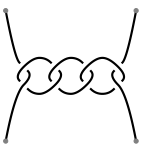
$2(\overline{2}(\overline{2}(20)0))$
$\circ$



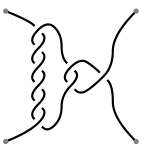
$2(2(2(20)))$
$z\rho$



$2(2\overline{(2(20))})$
$\circ$

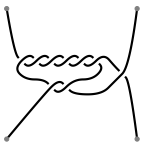


$2(2(2\overline{(20)}))$
$z\rho$

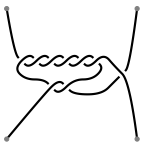


$6(21)$
x

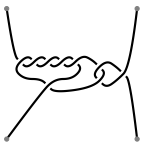
Tangles 263 – 325 (with loops)



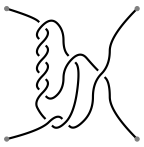
$6(2\,0)1$
z



$6(2\,0)\overline{1}$
z

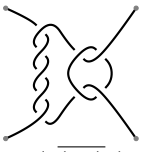


$5\,1(2\,1)$
x



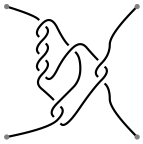
$5\,1(2\,0)1$
z

$5(2(2\,0))$
x



$5(2\overline{(2\,0)}0)$
$z\rho$

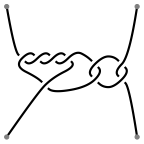
$5(2\overline{(2\,0)})$
x



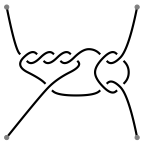
$4\,1\,2(2\,0)$
x

$4\,1\,2\overline{(2\,0)}$
x

$4\,1\,1\,1(2\,0)$
x

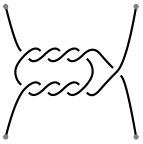


$4\,1(2(2\,0))$
x

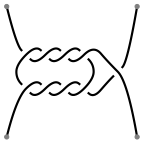


$4\,1(2\overline{(2\,0)}0)$
$z\rho$

$4(4\,1)$
$z\rho$



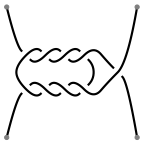
$4(4\,0)1$
$z\rho$



$4(4\,0)\overline{1}$
$z\rho$

$4(3\,1\,1)$
x

$4(3\,1\,0)1$
z



$4\overline{(4\,0)}1$
z

$4(3(2\,0))$
x

$4(3\overline{(2\,0)})$
x

$4(2\,3)$
x

$4(2\,2)1$
z

$4(2\,1\,2\,0)$
x

$4(2\,1\,1\,1\,0)$
x

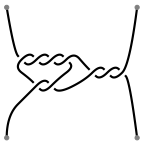
$4(2\,1(2\,0))$
x

$4(2\,1\overline{(2\,0)})$
x

$4(2\,1)2$
y

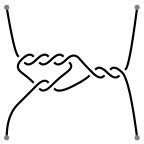
$4(2\,1)(2\,0)$
e

$4(2\,1)\overline{(2\,0)}$
e



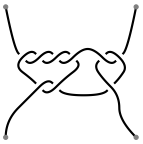
$4(2\,0)3$
z

$4(2\,0)2\,1$
x

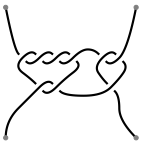


$4(2\,0)\overline{3}$
z

$4(2\,0)(3\,0)$
e

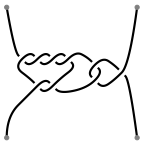


$4(2\,0)\overline{(2\,1\,0)}$
e



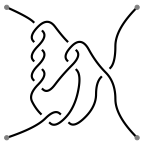
$4(2\,0)(2\,1\,0)$
e

$4(2\,0)\overline{(3\,0)}$
e



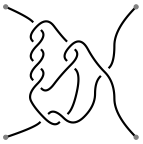
$4(2\,0)(2\,1)$
e

$4(2\,0)(2\,0)1$
e

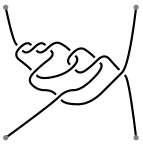


$4(2\,0)(2\,0)\overline{1}$
e

$4(2\,0)\overline{(2\,1)}$
e



$4(2\,0)\overline{(2\,0)1}$
e

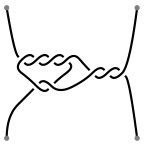


$3\,1(2\,1)1\,1$
y

$3\,1(2\,0)1\,2$
z

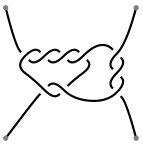
$3\,1(2\,0)1\,1\,1$
x

$3\,1(2\,0)1(2\,0)$
e

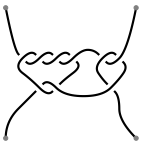


$4\overline{(2\,0)}3$
z

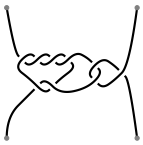
$4\overline{(2\,0)}2\,1$
x



$4\overline{(2\,0)}(3\,0)$
e



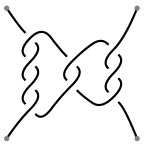
$4\overline{(2\,0)}(2\,1\,0)$
e



$4\overline{(2\,0)}(2\,1)$
e

$4\overline{(2\,0)}(2\,0)1$
e

$4\overline{(2\,0)}(2\,0)\overline{1}$
e



$4(2(3\,0))$
x

$4(2\overline{(2\,1\,0)})$
x

$4(2(2\,1\,0))$
x

$4(2\overline{(3\,0)})$
x

$4(2\overline{(2\,0)}1)$
$z\rho$

$4(2\overline{(2\,0)}0)1$
$z\rho$

$4(2\overline{(2\,0)}0)\overline{1}$
$z\rho$

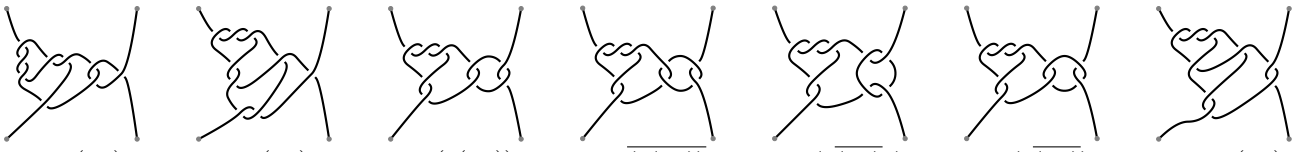
$3\,3(2\,1)$
x

$3\,3(2\,0)1$
z

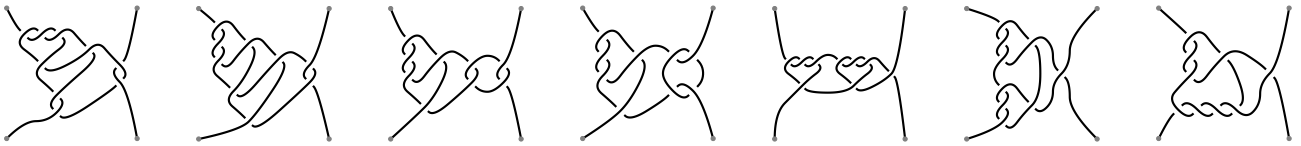
$3\,3(2\,0)\overline{1}$
z

$3\,3\overline{(2\,0)1}$
z

Tangles 326 – 388 (with loops)



$3\,2\,1(2\,1)$ x | $3\,2\,1(2\,0)1$ z | $3\,2(2(2\,0))$ x | $3\,2\overline{(2(2\,0))}$ x | $3\,2(2\overline{(2\,0)}0)$ $z\rho$ | $3\,2(2\overline{(2\,0)})$ x | $3\,1\,1\,2(2\,0)$ x



$3\,1\,1\,2\overline{(2\,0)}$ x | $3\,1\,1\,1\,1(2\,0)$ x | $3\,1\,1(2(2\,0))$ x | $3\,1\,1(2\overline{(2\,0)}0)$ $z\rho$ | $3\,1(3\,1\,1)$ $z\rho$ | $3\,1(3\,1\,0)1$ $z\rho$ | $3\,1\overline{(4\,0)}1$ $z\rho$

$3\,1(3(2\,0))$ x | $3\,1(2\,3)$ x | $3\,1(2\,2)1$ z | $3\,1(2\,1\,2\,0)$ x | $3\,1(2\,1\,1\,1\,0)$ x | $3\,1(2\,1(2\,0))$ x | $3\,1(2\,1)2$ y

$3\,1(2\,1)(2\,0)$ e | $3\,1(2\,1)\overline{(2\,0)}$ e | $3\,1(2\,0)3$ z | $3\,1(2\,0)2\,1$ x | $3\,1(2\,0)\overline{3}$ z | $3\,1(2\,0)(3\,0)$ e | $3\,1(2\,0)\overline{(2\,1\,0)}$ e

$3\,1(2\,0)(2\,1\,0)$ e | $3\,1(2\,0)\overline{(3\,0)}$ e | $3\,1(2\,0)(2\,1)$ e | $3\,1(2\,0)(2\,0)1$ e | $3\,1(2\,0)(2\,0)\overline{1}$ e | $3\,1(2\,0)\overline{(2\,1)}$ e | $3\,1(2\,0)\overline{(2\,0)1}$ e

$4(2\,1)1\,1$ y | $4(2\,0)1\,2$ z | $4(2\,0)1\,1\,1$ x | $4(2\,0)1(2\,0)$ e | $3\,1(2(2\,1\,0))$ x | $3\,1(2\overline{(3\,0)})$ x | $3\,1(2\overline{(2\,0)}1)$ $z\rho$

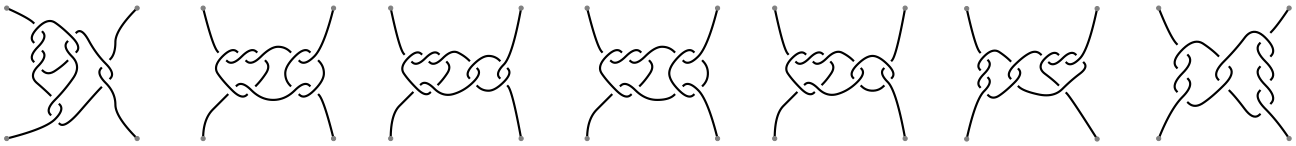
$3\,1(2\overline{(2\,0)}0)1$ $z\rho$ | $3(4(2\,0))$ x | $3(4\overline{(2\,0)})$ x | $3(3\,1(2\,0))$ x | $3(3\,1\overline{(2\,0)})$ x | $3(3\,0)(2\,1)$ x | $3(3\,0)(2\,0)1$ z

$3(3\,0)(2\,0)\overline{1}$ z | $3(3\,0)\overline{(2\,1)}$ x | $3(3\,0)\overline{(2\,0)1}$ z | $3(2\,1\,1\,0)(2\,0)$ e | $3(2\,1\,1\,0)\overline{(2\,0)}$ e | $3(2\,1\,1)(2\,0)$ e | $3(2\,1\,1)\overline{(2\,0)}$ e

$3\overline{(3\,0)}(2\,1)$ e | $3\overline{(3\,0)}(2\,0)1$ e | $3\overline{(3\,0)}(2\,0)\overline{1}$ / | $3(2\,0)2(2\,0)$ x | $3(2\,0)2\overline{(2\,0)}$ x | $3(2\,0)(2(2\,0)0)$ e | $3(2\,0)(2(2\,0))$ e

Tangles 389 – 451 (with loops)

$3(20)\overline{(2(20)0)}$	$3(20)\overline{(2(20))}$	$3(20)(2\overline{(20)}0)$	$3(20)(2\overline{(20)})$	$21(20)11(20)$	$\overline{21(20)}2(20)$	$3\overline{(20)}2(20)$
e	e	y	e	x	x	x



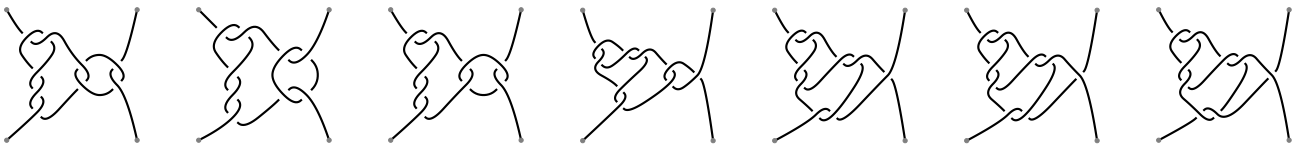
$3\overline{(20)}2\overline{(20)}$	$3\overline{(20)}(2(20)0)$	$3\overline{(20)}(2(20))$	$3\overline{(20)}(2\overline{(20)}0)$	$3\overline{(20)}(2\overline{(20)})$	$3(2(310))$	$3(2\overline{(40)})$
x	e	e	y	e	x	x

$3(2(22))$	$3(2(21))1$	$3(2(20)(20))$	$3(2(20)\overline{(20)})$	$3(2(20))2$	$3(2(20))\overline{2}$	$3(2(20))(20)$
x	z	x	x	y	y	e

$3(2(20))\overline{(20)}$	$3(\overline{(20)}(20))$	$3\overline{(2(20))}2$	$3\overline{(2(20))}(20)$	$3(2\overline{(20)}2)$	$3(2\overline{(20)}1)1$	$3(2\overline{(20)}0)2$
e	x	y	e	$z\rho$	$z\rho$	$z\rho$

$3(2\overline{(20)}0)\overline{2}$	$3(2\overline{(20)}0)(20)$	$3(2\overline{(20)}0)\overline{(20)}$	$21(2\overline{(20)}0)11$	$3(2\overline{(20)})2$	$3(2\overline{(20)})\overline{2}$	$3(2\overline{(20)})(20)$
$z\rho$	x	x	$z\rho$	y	y	e

$3(2\overline{(20)})\overline{(20)}$	$3(2(2\overline{(20)}0))$	$3(\overline{2}(\overline{2}(20)0))$	$232(20)$	$232\overline{(20)}$	$231(20)$	$23(2(20))$
e	x	x	x	x	x	x



$23\overline{(2(20))}$	$23(2\overline{(20)}0)$	$23(2\overline{(20)})$	$222(21)$	$222(20)1$	$222(20)\overline{1}$	$222\overline{(20)1}$
x	$z\rho$	x	x	z	z	z

$221(2\overline{(20)}0)$	$22\overline{(210)}(20)$	$22(210)(20)$	$22(210)\overline{(20)}$	$22(2(21))$	$22(2(20))1$	$22(2(20))\overline{1}$
$z\rho$	e	e	e	x	z	z

$22(2\overline{(20)}1)$	$22(2\overline{(20)}0)1$	$22(2\overline{(20)}0)\overline{1}$	$22(2\overline{(20)})\overline{1}$	$214\overline{(20)}$	$212\overline{(40)}$	$212\overline{(20)}2$
$z\rho$	$z\rho$	$z\rho$	z	x	x	y

Tangles 452 – 514 (with loops)

$2\,1\,2\overline{(2\,0)}2$
y

$2\,1\,2\overline{(2\,0)}(2\,0)$
e

$2\,1\,2\overline{(2\,0)(2\,0)}$
e

$2\,1\,2(2\overline{(2\,0)}0)$
$z\rho$

$2\,1\,1\,3\overline{(2\,0)}$
x

$2\,1\,1\,1\overline{(4\,0)}$
x

$2\,1\,1\,1(2\overline{(2\,0)}0)$
$z\rho$

$2\,1\,1\overline{(3\,0)}(2\,0)$
e

$2\,1\,1(2\overline{(2\,0)}1)$
$z\rho$

$2\,1\,1(2\overline{(2\,0)}0)1$
$z\rho$

$3(2\,1\,0)1(2\,0)$
e

$2\,1(2\,1\,0)(2\,1)$
x

$2\,1(2\,1\,0)(2\,0)1$
z

$2\,1(2\,1\,0)(2\,0)\overline{1}$
z

$2\,1(2\,1\,0)\overline{(2\,1)}$
x

$2\,1(2\,1\,0)\overline{(2\,0)1}$
z

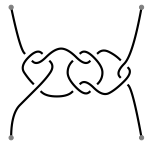
$2\,1(2\,0)2(2\,0)$
x

$2\,1(2\,0)2\overline{(2\,0)}$
x

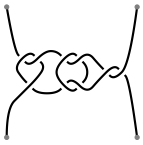
$3(2\,0)1\,1(2\,0)$
x

$\overline{3(2\,0)}2(2\,0)$
x

$3(2(2\,0))1\,1$
y



$2\,1(\overline{2(2\,0)}(2\,0))$
x



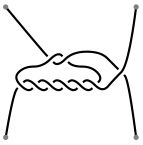
$2\,1(2\overline{(2\,0)}2)$
$z\rho$

$2\,1(2\overline{(2\,0)}1)1$
$z\rho$

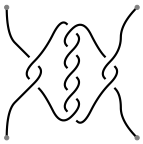
$2\,1(2\overline{(2\,0)}0)2$
$z\rho$

$2\,1(2\overline{(2\,0)}0)\overline{2}$
$z\rho$

$3(2\overline{(2\,0)}0)1\,1$
$z\rho$



$2\overline{(6\,0)}1$
z



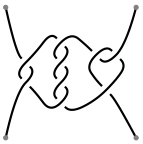
$2(5(2\,0))$
$z\rho$

$2(5\overline{(2\,0)})$
$z\rho$

$2(4\,1(2\,0))$
$z\rho$

$2(4\,1\overline{(2\,0)})$
$z\rho$

$\overline{2(3\,1\,0)}2\,1$
x



$2(4(2\,1\,0))$
x

$2(4\overline{(3\,0)})$
x

$2(3\,2(2\,0))$
$z\rho$

$2(3\,2\overline{(2\,0)})$
$z\rho$

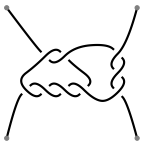
$2(3\,1\,1(2\,0))$
$z\rho$

$2(3\,1\,1\overline{(2\,0)})$
$z\rho$

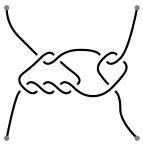
$\overline{2(4\,0)}2\,1$
x

$2\overline{(4\,0)}3$
z

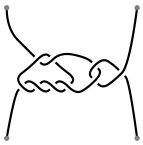
$2\overline{(4\,0)}2\,1$
x



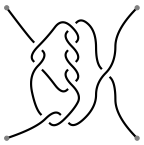
$2\overline{(4\,0)}(3\,0)$
e



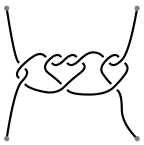
$2\overline{(4\,0)}(2\,1\,0)$
e



$2\overline{(4\,0)}(2\,1)$
e



$2\overline{(4\,0)}(2\,0)1$
e



$2(3\,1(2\,1\,0))$
x

$2(3\,1\overline{(3\,0)})$
x

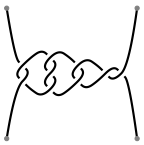
$2(3\,0)2(2\,0)$
x

$2(3\,0)2\overline{(2\,0)}$
x

$2(2\,1\,0)1\,1(2\,0)$
x

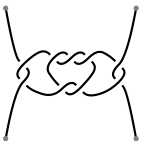
$\overline{2(2\,1\,0)}2(2\,0)$
x

$2(3\overline{(4\,0)})$
x



$2(3(2\,2))$
$z\rho$

$2(3(2\,1))1$
$z\rho$



$2(3(2\,0)(2\,0))$
y

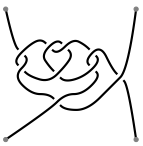
$2(3(2\,0)\overline{(2\,0)})$
z

$2(3(2\,0))2$
$z\rho$

$2(3(2\,0))\overline{2}$
$z\rho$

$2(3(2\,0))(2\,0)$
x

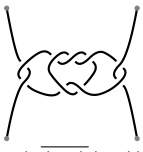
$2(3(2\,0))\overline{(2\,0)}$
x



$2(2\,1(2\,0))1\,1$
$z\rho$

$2(3\overline{(2\,0)}2\,0)$
x

Tangles 515 – 577 (with loops)


$2(3(\overline{2\,0})(2\,0))$
y

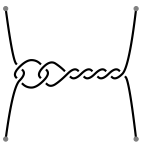
$2(3(\overline{2\,0})(2\,0))$
z

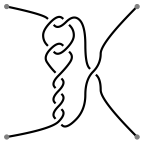
$2(3(\overline{2\,0}))2$
$z\rho$

$2(3(\overline{2\,0}))\overline{2}$
$z\rho$

$2(3(\overline{2\,0}))(2\,0)$
x

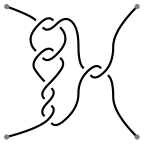
$2(3(\overline{2\,0}))\overline{(2\,0)}$
x


$2(2\,5)$
$z\rho$

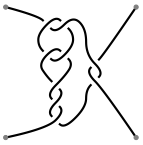

$2(2\,4)1$
$z\rho$

$2(2\,3(2\,0))$
$z\rho$

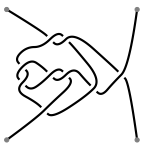
$2(2\,3\overline{(2\,0)})$
$z\rho$


$2(2\,3)2$
$z\rho$

$2(2\,3)(2\,0)$
x

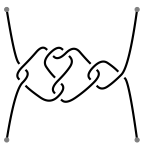

$2(2\,3)\overline{(2\,0)}$
x

$2(2\,2\,1\,1\,1)$
x


$2(2\,2\,1\,1\,0)1$
z

$2(2\,2\,1(2\,0))$
$z\rho$

$2(2\,2\,1\overline{(2\,0)})$
$z\rho$


$2(2\,2(2\,1))$
$z\rho$

$2(2\,2(2\,0))1$
$z\rho$

$2(2\,2(2\,0))\overline{1}$
$z\rho$

$2(2\,2\overline{(2\,0)})\overline{1}$
$z\rho$

$2(2\,2)3$
$z\rho$

$2(2\,2)2\,1$
$z\rho$

$2(2\,2)(3\,0)$
x

$2(2\,2)\overline{(2\,1\,0)}$
x

$2(2\,2)(2\,1\,0)$
x

$2(2\,2)\overline{(3\,0)}$
x

$2(2\,2)(2\,1)$
x

$2(2\,2)(2\,0)1$
z

$2(2\,2)(2\,0)\overline{1}$
z

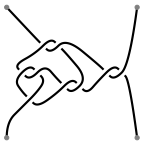
$2(2\,2)\overline{(2\,0)}1$
z

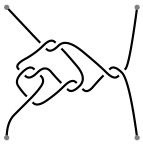
$2(2\,1\,4\,0)$
x

$2(2\,1\,3\,1\,0)$
x

$2(2\,1\,2\,2)$
x

$2(2\,1\,2\,1)1$
z


$2(2\,1\,2\,0)2$
y


$2(2\,1\,2\,0)\overline{2}$
y

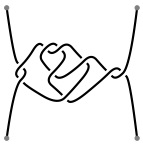
$2(2\,1\,2\,0)(2\,0)$
e

$2(2\,1\,2\,0)\overline{(2\,0)}$
e

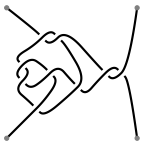
$2(2\,1\,1\,1\,0)1\,1$
y

$2(2\,1\,1\,3\,0)$
x

$2(2\,1\,1\,2\,1\,0)$
x


$2(2\,1\,1\,1\,2)$
x

$2(2\,1\,1\,1\,1)1$
z

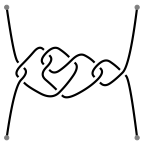

$2(2\,1\,1\,1\,0)2$
y

$2(2\,1\,1\,1\,0)\overline{2}$
y

$2(2\,1\,1\,1\,0)(2\,0)$
e

$2(2\,1\,1\,1\,0)\overline{(2\,0)}$
e

$2(2\,1\,2\,0)1\,1$
y


$2(2\,1\,1(2\,1))$
$z\rho$

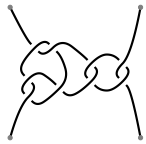
$2(2\,1\,1(2\,0))1$
$z\rho$

$2(2\,1\,1(2\,0))\overline{1}$
$z\rho$

$2(2\,1\,0)2(2\,0)$
x

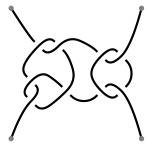
$2(2\,1\,0)2\overline{(2\,0)}$
x

$2(2\,1\,0)(2(2\,0)0)$
e


$2(2\,1\,0)(2(2\,0))$
e

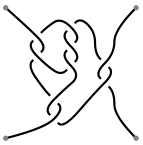
$2(2\,1\,0)\overline{(2(2\,0)0)}$
e

$2(2\,1\,0)\overline{(2(2\,0))}$
e


$2(2\,1\,0)(2\overline{(2\,0)}0)$
y

$2(2\,1\,0)(2\overline{(2\,0)})$
e

$2(3\,0)1\,1(2\,0)$
x

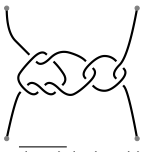

$\overline{2(3\,0)}2(2\,0)$
x

$\overline{2(3\,0)}2\overline{(2\,0)}$
x

Tangles 578 – 640 (with loops)

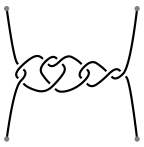
$2(\overline{3\,0})2(2\,0)$
x

$2(\overline{3\,0})2(\overline{2\,0})$
x



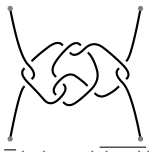
$2(\overline{3\,0})(2(2\,0))$
e

$2(2\,1(\overline{4\,0}))$
x



$2(2\,1(2\,2))$
$z\rho$

$2(2\,1(2\,1))1$
$z\rho$



$\overline{2}(2(2\,1\,0)\overline{(2\,0)})$
y

$2(2\,1(2\,0))2$
$z\rho$

$2(2\,1(2\,0))\overline{2}$
$z\rho$

$2(2\,1(2\,0))(2\,0)$
x

$2(2\,1(2\,0))\overline{(2\,0)}$
x

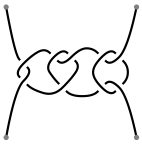
$2(3(2\,0))1\,1$
$z\rho$

$2(2\,1\overline{(2\,0)})2$
$z\rho$

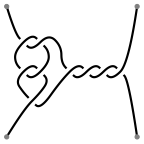
$2(2\,1\overline{(2\,0)})\overline{2}$
$z\rho$

$2(2\,1\overline{(2\,0)})(2\,0)$
x

$2(2\,1\overline{(2\,0)})\overline{(2\,0)}$
x

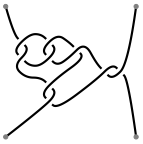


$2(2\,1(2\overline{(2\,0)}0))$
x



$2(2\,1)4$
$z\rho$

$2(2\,1)3\,1$
$z\rho$



$2(2\,1)2\,2$
$z\rho$

$2(2\,1)2\,1\,1$
$z\rho$

$2(2\,1)(4\,0)$
x

$2(2\,1)\overline{(3\,1\,0)}$
x

$2(2\,1)(3\,1\,0)$
x

$2(2\,1)\overline{(4\,0)}$
x

$2(2\,1)(3\,1)$
x

$2(2\,1)(3\,0)1$
z

$2(2\,1)(3\,0)\overline{1}$
z

$2(2\,1)\overline{(2\,1\,0)1}$
z

$2(2\,1)(2\,2\,0)$
x

$2(2\,1)\overline{(2\,1\,1\,0)}$
x

$2(2\,1)(2\,2)$
x

$2(2\,1)(2\,1\,1\,0)$
x

$2(2\,1)\overline{(2\,2\,0)}$
x

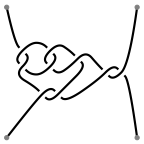
$2(2\,1)(2\,1\,1)$
x

$2(2\,1)(2\,1\,0)1$
z

$2(2\,1)\overline{(3\,0)}1$
z

$2(2\,1)\overline{(3\,0)1}$
z

$2(2\,1)(2\,1)1$
z



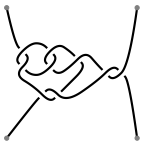
$2(2\,1)(2\,0)2$
y

$2(2\,1)(2\,0)\overline{2}$
y

$2(2\,1)(2\,0)(2\,0)$
e

$2(2\,1)(2\,0)\overline{(2\,0)}$
e

$2(2\,0)1(2\,0)1\,1$
y

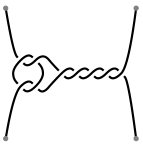


$2(2\,1)\overline{(2\,0)}2$
y

$2(2\,1)\overline{(2\,0)2}$
y

$2(2\,1)\overline{(2\,0)}(2\,0)$
e

$2(2\,1)\overline{(2\,0)(2\,0)}$
e



$2(2\,0)5$
$z\rho$

$2(2\,0)4\,1$
$z\rho$

$2(2\,0)3\,2$
$z\rho$

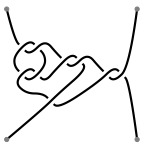
$2(2\,0)3\,1\,1$
$z\rho$

$2(2\,0)3(2\,0)$
x

$2(2\,0)3\overline{(2\,0)}$
x

$2(2\,0)2\,3$
$z\rho$

$2(2\,0)2\,2\,1$
$z\rho$



$2(2\,0)2\,1\,2$
$z\rho$

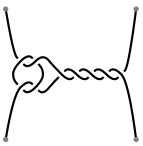
$2(2\,0)2\,1\,1\,1$
$z\rho$

$2(2\,0)2\,1(2\,0)$
x

$2(2\,0)2(3\,0)$
x

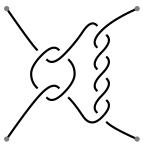
$2(2\,0)2(2\,1\,0)$
x

$2(2\,0)2\overline{(3\,0)}$
x

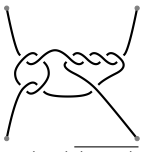


$2(2\,0)\overline{5}$
$z\rho$

Tangles 641 – 703 (with loops)

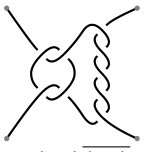


$2(20)(50)$
x



$2(20)\overline{(410)}$
x

$2(20)(410)$
x



$2(20)\overline{(50)}$
x

$2(20)(41)$
x

$2(20)(40)1$
z

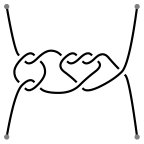
$2(20)(40)\overline{1}$
z

$2(20)(320)$
x

$2(20)(32)$
x

$2(20)(3110)$
x

$2(20)\overline{(320)}$
x



$2(20)(311)$
x

$2(20)(310)1$
z

$2(20)\overline{(41)}$
x

$2(20)\overline{(40)}1$
z

$2(20)\overline{(40)1}$
z

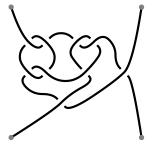
$2(20)(31)1$
z

$2(20)(30)2$
y

$2(20)(30)\overline{2}$
y

$2(20)(30)(20)$
e

$2(20)(30)\overline{(20)}$
e

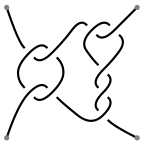


$\overline{2(20)}(210)11$
y

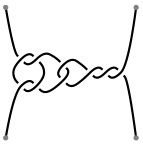
$2(20)\overline{(210)}2$
y

$2(20)(3(20))$
x

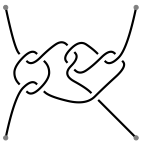
$2(20)(3\overline{(20)})$
x



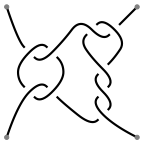
$2(20)(230)$
x



$2(20)(23)$
x



$2(20)(2210)$
x



$2(20)\overline{(230)}$
x

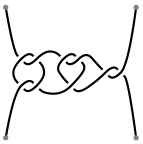
$2(20)(221)$
x

$2(20)(220)1$
z

$2(20)(220)\overline{1}$
z

$2(20)(22)1$
z

$2(20)(2120)$
x



$2(20)(212)$
x

$2(20)(21110)$
x

$2(20)(2111)$
x

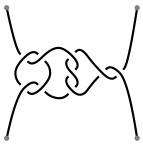
$2(20)(2110)1$
z

$2(20)\overline{(220)}1$
z

$2(20)(211)1$
z

$2(20)(210)2$
y

$2(20)(210)\overline{2}$
y



$2(20)\overline{(32)}$
x

$\overline{2(20)}(30)11$
y

$2(20)\overline{(30)}2$
y

$2(20)\overline{(30)2}$
y

$2(20)\overline{(30)}(20)$
e

$2(20)\overline{(30)(20)}$
e

$2(20)(21(20))$
x

$2(20)\overline{(3(20))}$
x

$2(20)(21)2$
y

$2(20)(21)(20)$
e

$2(20)(21)\overline{(20)}$
e

$2(20)(20)3$
z

$2(20)(20)21$
x

$2(20)(20)\overline{3}$
z

$2(20)(20)(30)$
e

$2(20)(20)\overline{(210)}$
e

$2(20)(20)(210)$
e

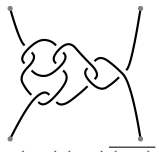
$2(20)(20)\overline{(30)}$
e

$2(20)(20)(21)$
e

$2(20)(20)(20)1$
e

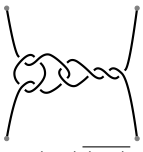
$2(20)(20)(20)\overline{1}$
e

Tangles 704 – 766 (with loops)

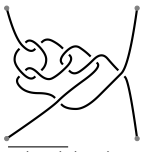


$2(20)(20)\overline{(21)}$
e

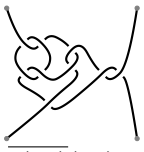
$2(20)(20)\overline{(20)1}$
e



$2(20)\overline{(23)}$
x



$\overline{2(20)}(21)11$
y



$\overline{2(20)}(20)12$
z

$\overline{2(20)}(20)111$
x

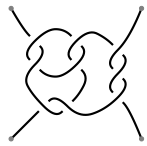
$\overline{2(20)}(20)1(20)$
e

$2(20)\overline{(21)}(20)$
e

$2(20)\overline{(20)}3$
z

$2(20)\overline{(20)}21$
x

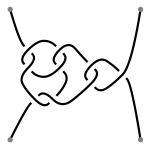
$2(20)\overline{(20)3}$
z



$2(20)\overline{(20)}(30)$
e

$2(20)\overline{(20)}(210)$
e

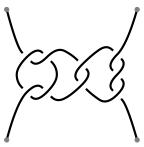
$2(20)\overline{(20)(30)}$
e



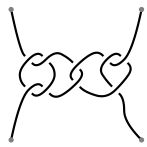
$2(20)\overline{(20)}(21)$
e

$2(20)\overline{(20)}(20)1$
e

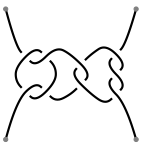
$2(20)\overline{(20)}(20)\overline{1}$
e



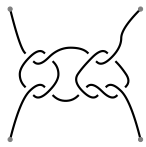
$2(20)(2(30))$
x



$2(20)(2(210))$
x



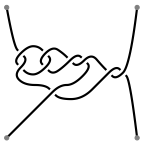
$2(20)\overline{(2(30))}$
x



$2(20)(2\overline{(30)}0)$
e

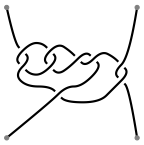
$2(20)(2\overline{(30)})$
x

$2(23)11$
$z\rho$

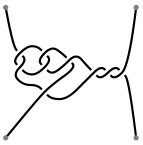


$2(22)12$
$z\rho$

$2(22)111$
$z\rho$



$2(22)1(20)$
x



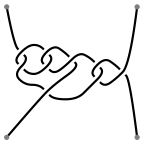
$2(21)13$
$z\rho$

$2(21)121$
$z\rho$

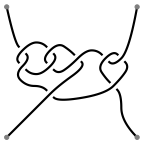
$2(21)112$
$z\rho$

$2(21)1111$
$z\rho$

$2(21)1(30)$
x

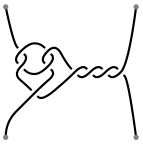


$2(21)1(21)$
x



$2(21)1(210)$
x

$2(21)1(20)1$
z



$2(20)14$
$z\rho$

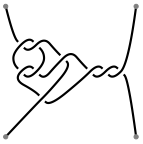
$2(20)131$
$z\rho$

$2(20)122$
$z\rho$

$2(20)1211$
$z\rho$

$2(20)12(20)$
x

$2(20)12\overline{(20)}$
x



$2(20)113$
$z\rho$

$2(20)1121$
$z\rho$

$2(20)1112$
$z\rho$

$2(20)11111$
$z\rho$

$2(20)111(20)$
x

$2(20)11(30)$
x

$2(20)11(210)$
x

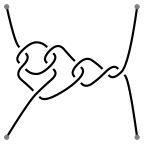
$2(20)11\overline{(30)}$
x

$2(20)1(40)$
x

$2(20)1(31)$
x

$2(20)1(310)$
x

$2(20)1(30)1$
z

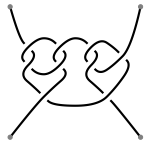


$2(20)1(22)$
x

$2(20)1(220)$
x

$2(20)1(21)1$
z

$2(20)1(211)$
x



$2(20)1(210)$
x

$2(20)1(210)1$
z

$2(20)1(20)2$
y

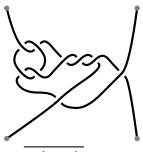
$2(20)1(20)\overline{2}$
y

$2(20)1(20)(20)$
e

$2(20)1(20)\overline{(20)}$
e

$2(21)(20)11$
y

Tangles 767 – 829 (with loops)



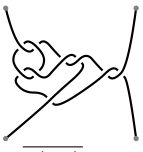
$\overline{2(20)}311$
$z\rho$

$2(20)\overline{41}$
$z\rho$

$\overline{2(20)}3\overline{(20)}$
x

$\overline{2(20)}23$
$z\rho$

$\overline{2(20)}221$
$z\rho$



$\overline{2(20)}212$
$z\rho$

$\overline{2(20)}2111$
$z\rho$

$2(20)\overline{32}$
$z\rho$

$\overline{2(20)}21(20)$
x

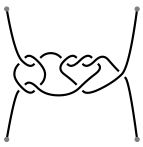
$2(20)\overline{3(20)}$
x

$\overline{2(20)}2(30)$
x

$\overline{2(20)}2(210)$
x

$\overline{2(20)}2\overline{(30)}$
x

$\overline{2(20)}(3110)$
x

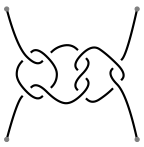


$\overline{2(20)}(311)$
x

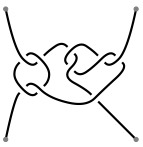
$\overline{2(20)}(310)1$
z

$\overline{2(20)}(31)1$
z

$2(20)(210)11$
y



$\overline{2(20)}(3\overline{(20)})$
x



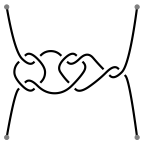
$\overline{2(20)}(2210)$
x

$\overline{2(20)}(221)$
x

$\overline{2(20)}(220)1$
z

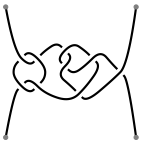
$\overline{2(20)}(22)1$
z

$\overline{2(20)}(2120)$
x



$\overline{2(20)}(212)$
x

$\overline{2(20)}(2110)$
x



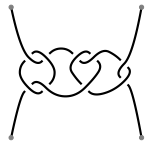
$\overline{2(20)}(211)$
x

$\overline{2(20)}(2110)1$
z

$\overline{2(20)}(211)1$
z

$\overline{2(20)}(210)2$
y

$2(20)(30)11$
y



$\overline{2(20)}(21(20))$
x

$\overline{2(20)}(21)2$
y

$\overline{2(20)}(21)(20)$
e

$\overline{2(20)}(20)21$
x

$\overline{2(20)}(20)(210)$
e

$\overline{2(20)}(20)(21)$
e

$\overline{2(20)}(20)(20)1$
e

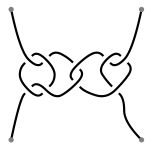
$2(20)(21)11$
y

$2(20)(20)12$
z

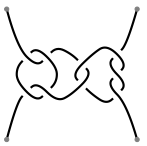
$2(20)(20)111$
x

$2(20)(20)1(20)$
e

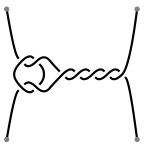
$\overline{2(20)}(20)21$
x



$\overline{2(20)}(2(210))$
x



$\overline{2(20)}(2\overline{(30)})$
x



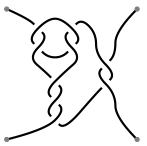
$2\overline{(20)}5$
$z\rho$

$2\overline{(20)}41$
$z\rho$

$2\overline{(20)}32$
$z\rho$

$2\overline{(20)}311$
$z\rho$

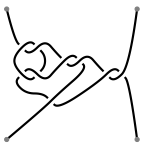
$2\overline{(20)}3(20)$
x



$2\overline{(20)}3\overline{(20)}$
x

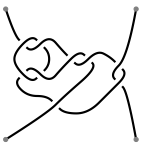
$2\overline{(20)}23$
$z\rho$

$2\overline{(20)}221$
$z\rho$



$2\overline{(20)}212$
$z\rho$

$2\overline{(20)}2111$
$z\rho$

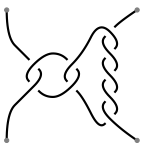


$2\overline{(20)}21(20)$
x

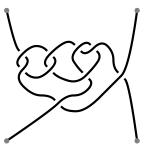
$2\overline{(20)}2(30)$
x

$2\overline{(20)}2(210)$
x

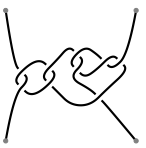
$2\overline{(20)}2\overline{(30)}$
x



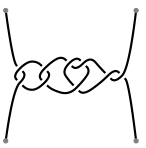
$2(2\overline{(50)})$
x



$2(2(210))11$
y



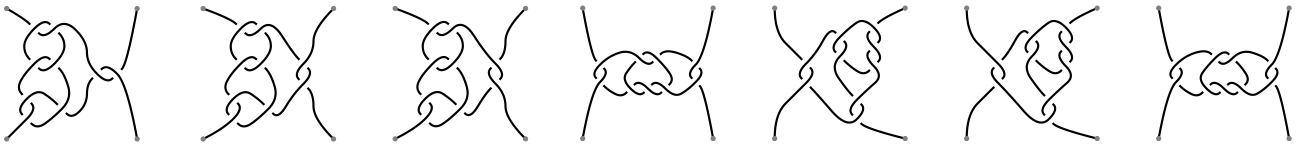
$2(2(2210))$
x



$2(2(212))$
x

Tangles 830 – 892 (with loops)

$2(2(2\,1\,1\,1))$	$2(2(2\,1\,1\,0))1$	$2(2(\overline{2\,2\,0}))1$	$2(2(2\,1\,1))1$	$2(2(2\,1\,0)(2\,0))$	$2(2(2\,1\,0)\overline{(2\,0)})$	$2(2(2\,1\,0))2$
x	z	z	z	y	z	y



$2(2(2\,1\,0))\overline{2}$	$2(2(2\,1\,0))(2\,0)$	$2(2(2\,1\,0))\overline{(2\,0)}$	$2(\overline{(3\,0)}(2\,0))$	$2(2(\overline{3\,0})2\,0)$	$\overline{2}(2(\overline{3\,0})2\,0)$	$2(2(\overline{3\,0})(2\,0))$
y	e	e	y	x	x	y

$2(2\overline{(3\,0)})2$	$2(2\overline{(3\,0)})(2\,0)$	$2(2(2\,0)(2\,1\,0))$	$2(2(2\,0)\overline{(3\,0)})$	$2(2\overline{(2\,0)}3)$	$2(2\overline{(2\,0)}2)1$	$2(2\overline{(2\,0)}1)2$
y	e	x	x	$z\rho$	$z\rho$	$z\rho$

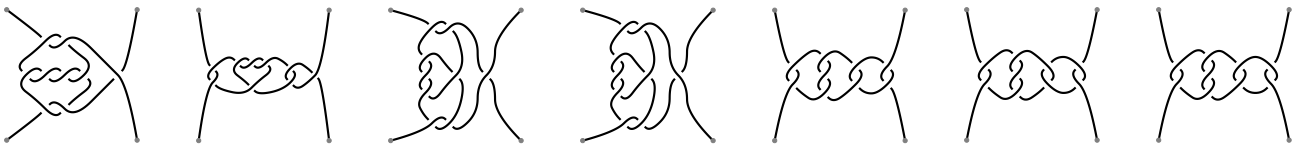
$2(2\overline{(2\,0)}1)(2\,0)$	$2(2\overline{(2\,0)}1)\overline{(2\,0)}$	$2(2\overline{(2\,0)}0)3$	$2(2\overline{(2\,0)}0)2\,1$	$2(2\overline{(2\,0)}0)\overline{3}$	$2(2\overline{(2\,0)}0)(3\,0)$	$2(2\overline{(2\,0)}0)(2\,1\,0)$
x	x	$z\rho$	$z\rho$	$z\rho$	x	x

$2(2\overline{(2\,0)}0)\overline{(3\,0)}$	$2(2\overline{(2\,0)}0)(2\,1)$	$2(2\overline{(2\,0)}0)(2\,0)1$	$2(2\overline{(2\,0)}0)(2\,0)\overline{1}$	$2(2\overline{(2\,0)}1)1\,1$	$2(2\overline{(2\,0)}0)1\,2$	$2(2\overline{(2\,0)}0)1\,1\,1$
x	x	z	z	$z\rho$	$z\rho$	$z\rho$

$2(2\overline{(2\,0)}0)1(2\,0)$	$\overline{2}(\overline{2}(2\,0)0)2\,1$	$\overline{2}(\overline{2}(2\,0)0)(2\,1\,0)$	$\overline{2}(\overline{2}(2\,0)0)(2\,1)$	$\overline{2}(\overline{2}(2\,0)0)(2\,0)1$	$4(2(2\,1))$	$4(2(2\,0))1$
x	$z\rho$	x	x	z	x	z

$4(2(2\,0))\overline{1}$	$4(2\overline{(2\,0)})\overline{1}$	$3\,1(2(2\,1))$	$3\,1(2(2\,0))1$	$3(2(2(2\,0)))$	$3(2\overline{(2(2\,0))})$	$3(2(2\overline{(2\,0)}))$
z	z	x	z	x	x	x

$2\,1\,2\overline{(2(2\,0))}$	$2\,1\,2(2\overline{(2\,0)})$	$2\,1(2\overline{(2\,0)}0)(2\,0)$	$2\,1(2\overline{(2\,0)}0)\overline{(2\,0)}$	$2(4(2\,1))$	$2(4(2\,0))1$	$2(4(2\,0))\overline{1}$
x	x	x	x	$z\rho$	$z\rho$	$z\rho$



$2(4\overline{(2\,0)})\overline{1}$	$2(3\,1(2\,1))$	$2(3\,1(2\,0))1$	$2(3\,1(2\,0))\overline{1}$	$2(3(2(2\,0)))$	$2(3\overline{(2(2\,0))})$	$2(3(2\overline{(2\,0)}))$
$z\rho$	$z\rho$	$z\rho$	$z\rho$	x	x	x

Tangles 893 – 955 (with loops)

$2(2\,1\,2(2\,0))$
$z\rho$

$2(2\,1\,2\overline{(2\,0)})$
$z\rho$

$2(2\,1\,1\,1(2\,0))$
$z\rho$

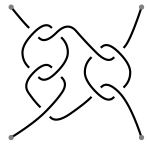
$2(2\,1\,1\,1\overline{(2\,0)})$
$z\rho$

$2(2\,1)2(2\,0)$
x

$2(2\,1)2\overline{(2\,0)}$
x

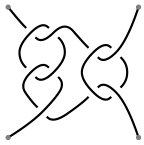
$2(2\,1)(2(2\,0)0)$
x

$2(2\,1)(2(2\,0))$
x



$2(2\,1)\overline{(2(2\,0)0)}$
x

$2(2\,1)\overline{(2(2\,0))}$
x



$2(2\,1)(2\overline{(2\,0)}0)$
$z\rho$

$2(2\,1)(2\overline{(2\,0)})$
x

$2(2\,0)2(2\,1)$
x

$2(2\,0)2(2\,0)1$
z

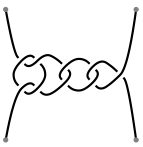
$2(2\,0)2(2\,0)\overline{1}$
z

$2(2\,0)2\overline{(2\,0)1}$
z

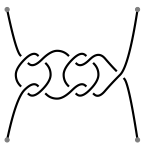
$2(2\,0)\overline{(2\,1\,0)}(2\,0)$
e

$2(2\,0)(2\,1\,0)(2\,0)$
e

$2(2\,0)(2\,1\,0)\overline{(2\,0)}$
e

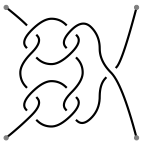


$2(2\,0)(2(2\,1))$
x

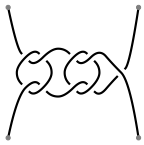


$2(2\,0)(2(2\,0)1)$
$z\rho$

$2(2\,0)(2(2\,0)0)1$
$z\rho$



$2(2\,0)(2(2\,0)0)\overline{1}$
$z\rho$

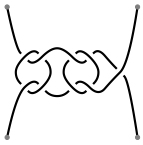


$2(2\,0)(2(2\,0)\overline{1})$
$z\rho$

$2(2\,0)(2(2\,0))1$
z

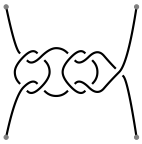
$2(2\,0)(2(2\,0))\overline{1}$
z

$2(2\,0)(2(2\,0)1\,0)$
x



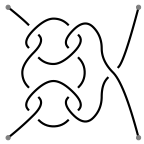
$2(2\,0)(\overline{2(2\,0)}1)$
x

$2(2\,0)\overline{(2(2\,0)0)}1$
z

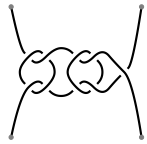


$2(2\,0)(2\overline{(2\,0)}1)$
$z\rho$

$2(2\,0)(2\overline{(2\,0)}0)1$
$z\rho$



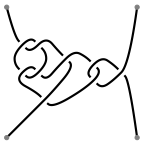
$2(2\,0)(2\overline{(2\,0)}0)\overline{1}$
$z\rho$



$2(2\,0)(2\overline{(2\,0)1})$
$z\rho$

$2(2\,0)(2\overline{(2\,0)})\overline{1}$
z

$2(2\,1)1\,1(2\,0)$
x



$2(2\,0)1\,1(2\,1)$
x

$2(2\,0)1\,1(2\,0)1$
z

$2(2\,0)1(2(2\,0))$
x

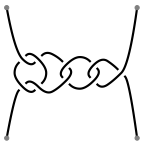
$2(2\,0)1\overline{(2(2\,0)0)}$
x

$2(2\,0)1(\overline{2}(2\,0)0)$
$z\rho$

$\overline{2(2\,0)}2(2\,1)$
x

$\overline{2(2\,0)}2(2\,0)1$
z

$\overline{2(2\,0)}(2\,1\,0)(2\,0)$
e



$\overline{2(2\,0)}(2(2\,1))$
x

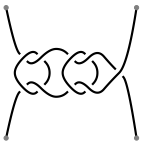
$\overline{2(2\,0)}(2(2\,0))1$
z

$2\overline{(2\,0)}2(2\,1)$
x

$2\overline{(2\,0)}2(2\,0)1$
z

$2\overline{(2\,0)}2(2\,0)\overline{1}$
z

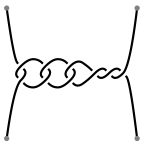
$2\overline{(2\,0)}2\overline{(2\,0)1}$
z



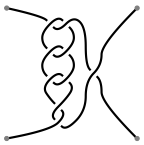
$2\overline{(2\,0)}(2\overline{(2\,0)}1)$
$z\rho$

$2\overline{(2\,0)}(2\overline{(2\,0)}0)1$
$z\rho$

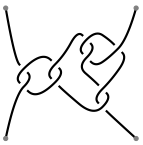
$2(2\overline{(4\,0)})1$
z



$2(2(2\,3))$
$z\rho$

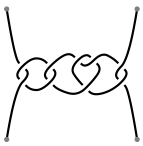


$2(2(2\,2))1$
$z\rho$

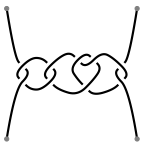


$2(2(2\,1\,2\,0))$
x

$2(2(2\,1\,1\,1\,0))$
x



$2(2(2\,1(2\,0)))$
x

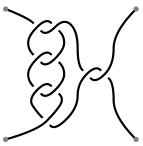


$2(2(2\,1\overline{(2\,0)}))$
x

$2(2(2\,1)(2\,0))$
$z\rho$

$\overline{2}(2(2\,1)\overline{(2\,0)})$
$z\rho$

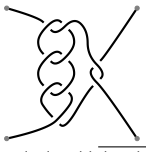
$2(2(2\,1)\overline{(2\,0)})$
$z\rho$



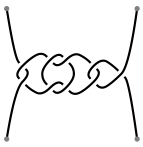
$2(2(2\,1))2$
$z\rho$

$2(2(2\,1))(2\,0)$
x

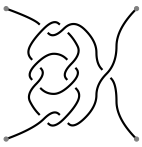
Tangles 956 – 1018 (with loops)



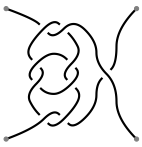
$2(2(2\,1))\overline{(2\,0)}$
x



$2(2(2\,0)(2\,1))$
$z\rho$

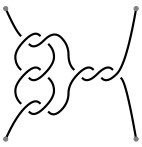


$2(2(2\,0)(2\,0))1$
$z\rho$



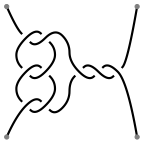
$2(2(2\,0)(2\,0))\overline{1}$
$z\rho$

$2(2(2\,0)\overline{(2\,0)})\overline{1}$
$z\rho$



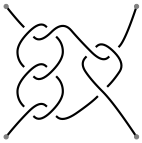
$2(2(2\,0))3$
$z\rho$

$2(2(2\,0))2\,1$
$z\rho$



$2(2(2\,0))\overline{3}$
$z\rho$

$2(2(2\,0))(3\,0)$
x

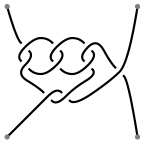


$2(2(2\,0))\overline{(2\,1\,0)}$
x

$2(2(2\,0))(2\,1\,0)$
x

$2(2(2\,0))\overline{(3\,0)}$
x

$2(2(2\,0))(2\,1)$
x

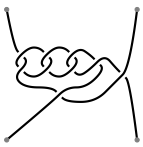


$2(2(2\,0))(2\,0)1$
z

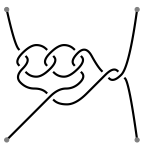
$2(2(2\,0))(2\,0)\overline{1}$
z

$2(2(2\,0))\overline{(2\,1)}$
x

$2(2(2\,0))\overline{(2\,0)1}$
z



$2(2(2\,1))1\,1$
$z\rho$



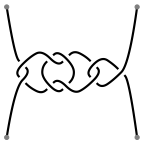
$2(2(2\,0))1\,2$
$z\rho$

$2(2(2\,0))1\,1\,1$
$z\rho$

$2(2(2\,0))1(2\,0)$
x

$2(2(2\,0)1(2\,0))$
$z\rho$

$\overline{2(2(2\,0))}2\,1$
$z\rho$



$2(\overline{2(2\,0)}(2\,1))$
$z\rho$

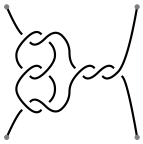
$2(\overline{2(2\,0)}(2\,0))1$
$z\rho$

$2\overline{(2(2\,0))}2\,1$
$z\rho$

$\overline{2(2(2\,0))}(2\,1\,0)$
x

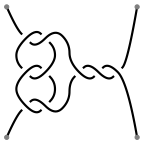
$\overline{2(\overline{2(2\,0)})}(2\,1)$
x

$\overline{2(2(2\,0))}(2\,0)1$
z



$2(2\overline{(2\,0)})3$
$z\rho$

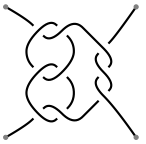
$2(2\overline{(2\,0)})2\,1$
$z\rho$



$2(2\overline{(2\,0)})\overline{3}$
$z\rho$

$2(2\overline{(2\,0)})(3\,0)$
x

$2(2\overline{(2\,0)})(2\,1\,0)$
x

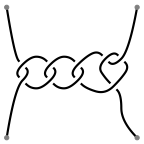


$2(2\overline{(2\,0)})\overline{(3\,0)}$
x

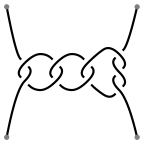
$2(2\overline{(2\,0)})(2\,1)$
x

$2(2\overline{(2\,0)})(2\,0)1$
z

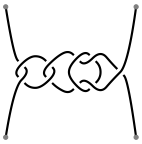
$2(2\overline{(2\,0)})(2\,0)\overline{1}$
z



$2(2(2(2\,1\,0)))$
x

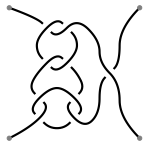


$2(2(2\overline{(3\,0)}))$
x

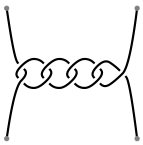


$2(2(2\overline{(2\,0)}1))$
$z\rho$

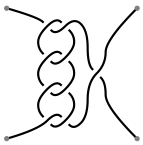
$2(2(2\overline{(2\,0)}0))1$
$z\rho$



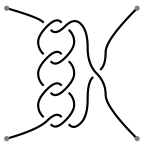
$2(2(2\overline{(2\,0)}0))\overline{1}$
$z\rho$



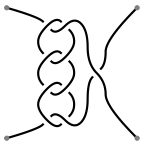
$2(2(2(2\,1)))$
$z\rho$



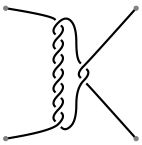
$2(2(2(2\,0)))1$
$z\rho$



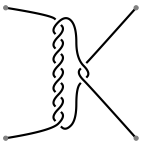
$2(2(2(2\,0)))\overline{1}$
$z\rho$



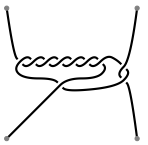
$2(2(2\overline{(2\,0)}))\overline{1}$
$z\rho$



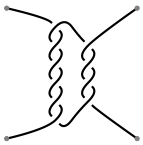
$8(2\,0)$
x



$8\overline{(2\,0)}$
x

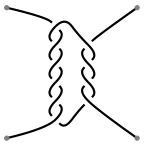


$7\,1(2\,0)$
x

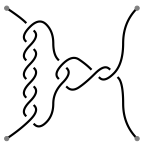


$6(4\,0)$
x

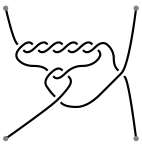
$6(3\,1\,0)$
x



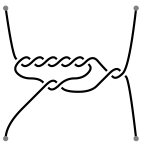
$6\overline{(4\,0)}$
x



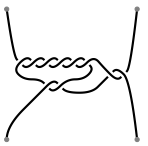
$6(2\,2)$
x



$6(2\,1)1$
z



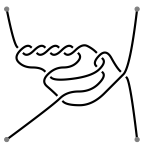
$6(2\,0)2$
y



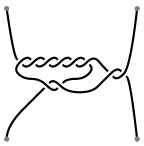
$6(2\,0)\overline{2}$
y

$6(2\,0)(2\,0)$
e

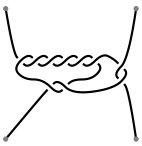
$6(2\,0)\overline{(2\,0)}$
e



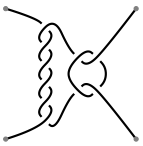
$5\,1(2\,0)1\,1$
y



$6\overline{(2\,0)}2$
y



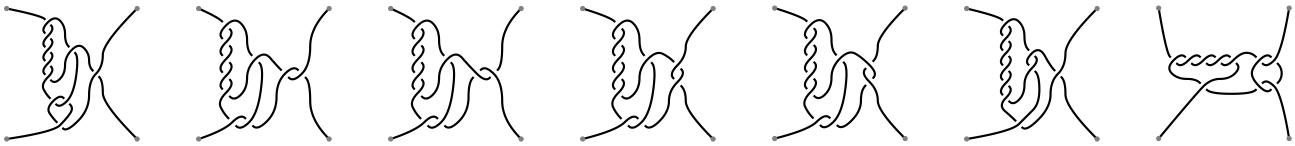
$6\overline{(2\,0)}(2\,0)$
e



$6(2\overline{(2\,0)}0)$
$z\rho$

Tangles 1019 – 1081 (with loops)

$5\,3(2\,0)$ x | $5\,3\overline{(2\,0)}$ x | $5\,2\,1(2\,0)$ x | $5\,1(4\,0)$ x | $5\,1(3\,1\,0)$ x | $5\,1\overline{(4\,0)}$ x | $5\,1(2\,2)$ x



$5\,1(2\,1)1$ z | $5\,1(2\,0)2$ y | $5\,1(2\,0)\overline{2}$ y | $5\,1(2\,0)(2\,0)$ e | $5\,1(2\,0)\overline{(2\,0)}$ e | $6(2\,0)1\,1$ y | $5\,1(2\overline{(2\,0)}0)$ $z\rho$

$5(3\,0)(2\,0)$ e | $5(3\,0)\overline{(2\,0)}$ e | $5\overline{(3\,0)}(2\,0)$ e | $5(2(2\,1))$ x | $5(2(2\,0))1$ z | $5(2(2\,0))\overline{1}$ z | $5(2\overline{(2\,0)}1)$ $z\rho$

$5(2\overline{(2\,0)}0)1$ $z\rho$ | $5(2\overline{(2\,0)}0)\overline{1}$ $z\rho$ | $5(2\overline{(2\,0)})\overline{1}$ z | $4\,2\,2(2\,0)$ x | $4\,2\,2\overline{(2\,0)}$ x | $4\,2\,1\,1(2\,0)$ x | $4\,2(2(2\,0))$ x

$4\,2\overline{(2(2\,0))}$ x | $4\,2(2\overline{(2\,0)}0)$ $z\rho$ | $4\,2(2\overline{(2\,0)})$ x | $4\,1\,2(2\,1)$ x | $4\,1\,2(2\,0)1$ z | $4\,1\,2(2\,0)\overline{1}$ z | $4\,1\,2\overline{(2\,0)1}$ z

$4\,1\,1\,1(2\,1)$ x | $4\,1\,1\,1(2\,0)1$ z | $4\,1\,1(2(2\,0))$ x | $4\,1\,1(2\overline{(2\,0)}0)$ $z\rho$ | $4\,1(2\,1\,0)(2\,0)$ e | $4\,1(2\,1\,0)\overline{(2\,0)}$ e | $4\,1(2(2\,1))$ x

$4\,1(2(2\,0))1$ z | $4\,1(2\overline{(2\,0)}1)$ $z\rho$ | $4\,1(2\overline{(2\,0)}0)1$ $z\rho$ | $4(4\,2)$ $z\rho$ | $4(4\,1)1$ $z\rho$ | $4(4\,0)2$ $z\rho$ | $4(4\,0)\overline{2}$ $z\rho$

$4(4\,0)(2\,0)$ x | $4(4\,0)\overline{(2\,0)}$ x | $3\,1(3\,1\,0)1\,1$ $z\rho$ | $4\overline{(3\,1\,0)}2$ $z\rho$ | $4\overline{(3\,1\,0)}(2\,0)$ x | $4(3\,3\,0)$ x | $4(3\,2\,1\,0)$ x

$4(3\,1\,2)$ x | $4(3\,1\,1)1$ z | $4(3\,1\,0)2$ y | $4(3\,1\,0)\overline{2}$ y | $4(3\,1\,0)(2\,0)$ e | $4(3\,1\,0)\overline{(2\,0)}$ e | $4\overline{(4\,0)}2$ y

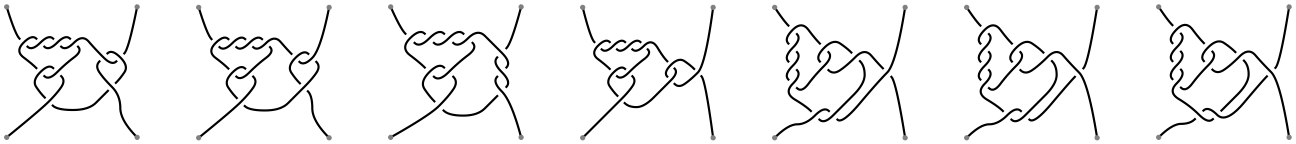
Tangles 1082 – 1144 (with loops)

$4(\overline{40})(20)$	$4(3(21))$	$4(3(20))1$	$4(3(20))\overline{1}$	$4(3(\overline{20}))\overline{1}$	$4(24)$	$4(23)1$
e	x	z	z	z	x	z

$4(2220)$	$4(22110)$	$4(22(20))$	$4(22\overline{(20)})$	$4(22)2$	$4(22)(20)$	$4(22)\overline{(20)}$
x	x	x	x	y	e	e

$4(2121)$	$4(2120)1$	$4(2120)\overline{1}$	$4(21111)$	$4(21110)1$	$4(211(20))$	$4(211\overline{(20)})$
x	z	z	x	z	x	x

$4(21(21))$	$4(21(20))1$	$4(21(20))\overline{1}$	$4\overline{(3(20))}1$	$4(21)3$	$4(21)21$	$4(21)(30)$
x	z	z	z	z	x	e

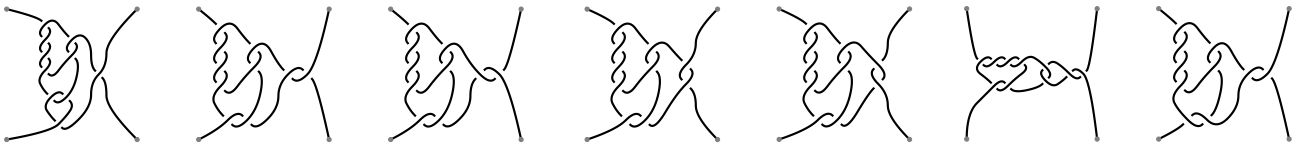


$4(21)\overline{(210)}$	$4(21)(210)$	$4(21)\overline{(30)}$	$4(21)(21)$	$4(21)(20)1$	$4(21)(20)\overline{1}$	$4(21)\overline{(20)1}$
e	e	e	e	e	e	e

$4(20)4$	$4(20)31$	$4(20)22$	$4(20)211$	$4(20)\overline{4}$	$4(20)(40)$	$4(20)\overline{(310)}$
y	y	x	z	y	e	e

$4(20)(310)$	$4(20)\overline{(40)}$	$4(20)(31)$	$4(20)(30)1$	$4(20)(30)\overline{1}$	$4(20)(220)$	$4(20)(22)$
e	e	e	e	e	e	e

$4(20)(2110)$	$4(20)\overline{(220)}$	$4(20)(211)$	$4(20)(210)1$	$4(20)\overline{(31)}$	$4(20)\overline{(30)}1$	$4(20)\overline{(30)1}$
e	e	e	e	e	e	e



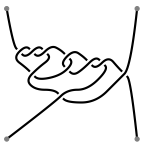
$4(20)(21)1$	$4(20)(20)2$	$4(20)(20)\overline{2}$	$4(20)(20)(20)$	$4(20)(20)\overline{(20)}$	$4(20)\overline{(22)}$	$4(20)\overline{(20)}2$
e	e	e	e	e	e	e

Tangles 1145 – 1207 (with loops)

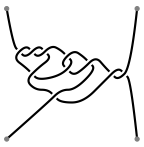
$4(20)\overline{(20)2}$
e

$4(20)\overline{(20)}(20)$
e

$4(20)\overline{(20)(20)}$
e

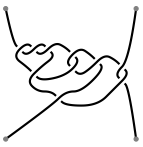


$31(22)11$
y



$31(21)12$
z

$31(21)111$
x



$31(21)1(20)$
e

$31(20)13$
y

$31(20)121$
y

$31(20)112$
x

$31(20)1111$
z

$31(20)1(30)$
e

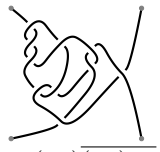
$31(20)1(21)$
e

$31(20)1(210)$
e

$31(20)1(20)1$
e

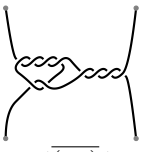
$31(20)\overline{211}$
z

$31(20)\overline{31}$
y



$31(20)\overline{(20)11}$
e

$31(20)(20)11$
e

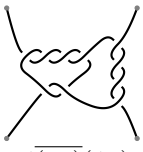


$4\overline{(20)}4$
y

$4\overline{(20)}31$
y

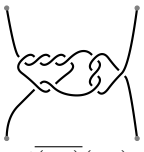
$4\overline{(20)}22$
x

$4\overline{(20)}211$
z



$4\overline{(20)}(40)$
e

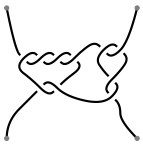
$4\overline{(20)}(310)$
e



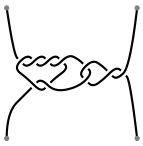
$4\overline{(20)}(31)$
e

$4\overline{(20)}(30)1$
e

$4\overline{(20)}(30)\overline{1}$
e

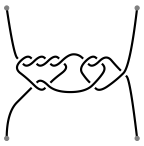


$4\overline{(20)}(220)$
e



$4\overline{(20)}(22)$
e

$4\overline{(20)}(2110)$
e



$4\overline{(20)}(211)$
e

$4\overline{(20)}(210)1$
e

$4\overline{(20)(30)}1$
e

$4\overline{(20)}(21)1$
e

$4\overline{(20)}(20)2$
e

$4\overline{(20)}(20)\overline{2}$
e

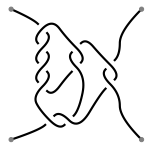
$4\overline{(20)}(20)(20)$
e

$4\overline{(20)}(20)\overline{(20)}$
e

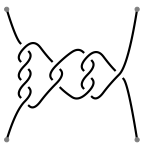
$\overline{4}(20)(20)11$
e

$4\overline{(20)(20)}2$
e

$4\overline{(20)(20)}(20)$
e



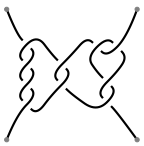
$4\overline{(20)(20)(20)}$
e



$4(2(31))$
x

$4(2(30))1$
z

$4(2(30))\overline{1}$
z



$4(2(220))$
x

$4(2(2110))$
x

$4(2\overline{(220)})$
x

$4(2(211))$
x

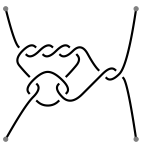
$4(2(210))1$
z

$4(2\overline{(30)})1$
z

$4(2\overline{(30)})\overline{1}$
z

$4(2\overline{(20)}2)$
$z\rho$

$4(2\overline{(20)}1)1$
$z\rho$



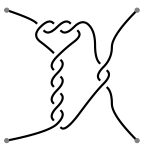
$4(2\overline{(20)}0)2$
$z\rho$

$4(2\overline{(20)}0)\overline{2}$
$z\rho$

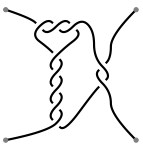
$4(2\overline{(20)}0)(20)$
x

$4(2\overline{(20)}0)\overline{(20)}$
x

$31(2\overline{(20)}0)11$
$z\rho$



$35(20)$
x



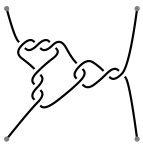
$35\overline{(20)}$
x

$341(20)$
x

Tangles 1208 – 1270 (with loops)

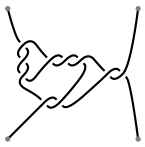
$3\,3(3\,1\,0)$
x

$3\,3\overline{(4\,0)}$
x



$3\,3(2\,2)$
x

$3\,3(2\,1)1$
z



$3\,3(2\,0)2$
y

$3\,3(2\,0)\overline{2}$
y

$3\,3(2\,0)(2\,0)$
e

$3\,3(2\,0)\overline{(2\,0)}$
e

$3\,2\,1(2\,0)1\,1$
y

$3\,3\overline{(2\,0)}2$
y

$3\,3\overline{(2\,0)2}$
y

$3\,3\overline{(2\,0)}(2\,0)$
e

$3\,3\overline{(2\,0)(2\,0)}$
e

$3\,3(2\overline{(2\,0)}0)$
$z\rho$

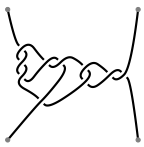
$3\,2\,3(2\,0)$
x

$3\,2\,3\overline{(2\,0)}$
x

$3\,2\,2\,1(2\,0)$
x

$3\,2\,1(3\,1\,0)$
x

$3\,2\,1\overline{(4\,0)}$
x



$3\,2\,1(2\,2)$
x

$3\,2\,1(2\,1)1$
z

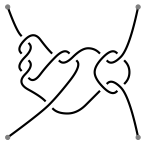
$3\,2\,1(2\,0)2$
y

$3\,2\,1(2\,0)\overline{2}$
y

$3\,2\,1(2\,0)(2\,0)$
e

$3\,2\,1(2\,0)\overline{(2\,0)}$
e

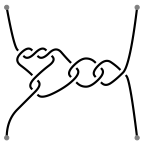
$3\,3(2\,0)1\,1$
y



$3\,2\,1(2\overline{(2\,0)}0)$
$z\rho$

$3\,2\overline{(3\,0)}(2\,0)$
e

$3\,2\overline{(3\,0)(2\,0)}$
e



$3\,2(2(2\,1))$
x

$3\,2(2(2\,0))1$
z

$3\,2(2(2\,0))\overline{1}$
z

$3\,2(2\overline{(2\,0)}1)$
$z\rho$

$3\,2(2\overline{(2\,0)}0)1$
$z\rho$

$3\,2(2\overline{(2\,0)}0)\overline{1}$
$z\rho$

$3\,2(2\overline{(2\,0)})\overline{1}$
z

$3\,1\,2\,2(2\,0)$
x

$3\,1\,2\,2\overline{(2\,0)}$
x

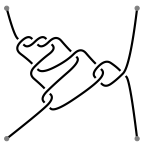
$3\,1\,2\,1\,1(2\,0)$
x

$3\,1\,2(2(2\,0))$
x

$3\,1\,2\overline{(2(2\,0))}$
x

$3\,1\,2(2\overline{(2\,0)}0)$
$z\rho$

$3\,1\,2(2\overline{(2\,0)})$
x



$3\,1\,1\,2(2\,1)$
x

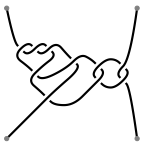
$3\,1\,1\,2(2\,0)1$
z

$3\,1\,1\,2(2\,0)\overline{1}$
z

$3\,1\,1\,2\overline{(2\,0)1}$
z

$3\,1\,1\,1\,1(2\,1)$
x

$3\,1\,1\,1\,1(2\,0)1$
z

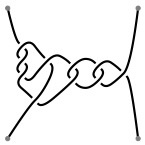


$3\,1\,1\,1(2(2\,0))$
x

$3\,1\,1\,1(2\overline{(2\,0)}0)$
$z\rho$

$3\,1\,1(2\,1\,0)(2\,0)$
e

$3\,1\,1(2\,1\,0)\overline{(2\,0)}$
e



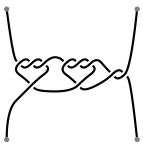
$3\,1\,1(2(2\,1))$
x

$3\,1\,1(2(2\,0))1$
z

$3\,1\,1(2\overline{(2\,0)}1)$
$z\rho$

$3\,1\,1(2\overline{(2\,0)}0)1$
$z\rho$

$4(3\,1\,0)1\,1$
y



$3\,1(3\,1\,2)$
$z\rho$

$3\,1(3\,1\,1)1$
$z\rho$

$3\,1(3\,1\,0)2$
$z\rho$

$3\,1(3\,1\,0)\overline{2}$
$z\rho$

$3\,1(3\,1\,0)(2\,0)$
x

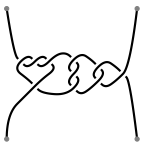
Tangles 1271 – 1333 (with loops)

$3\,1(3\,1\,0)\overline{(2\,0)}$
x

$4(4\,0)1\,1$
$z\rho$

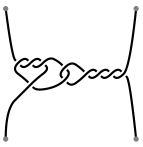
$3\,1\overline{(4\,0)}2$
$z\rho$

$3\,1\overline{(4\,0)}(2\,0)$
x

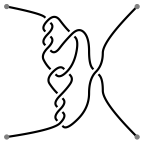


$3\,1(3(2\,1))$
x

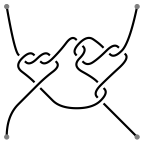
$3\,1(3(2\,0))1$
z



$3\,1(2\,4)$
x

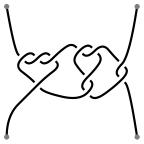


$3\,1(2\,3)1$
z

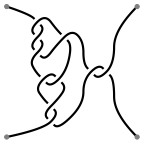


$3\,1(2\,2\,2\,0)$
x

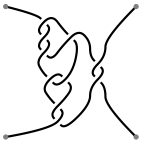
$3\,1(2\,2\,1\,1\,0)$
x



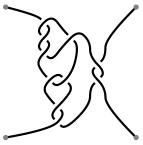
$3\,1(2\,2(2\,0))$
x



$3\,1(2\,2)2$
y



$3\,1(2\,2)(2\,0)$
e



$3\,1(2\,2)\overline{(2\,0)}$
e

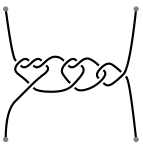
$3\,1(2\,1\,2\,1)$
x

$3\,1(2\,1\,2\,0)1$
z

$3\,1(2\,1\,1\,1\,1)$
x

$3\,1(2\,1\,1\,1\,0)1$
z

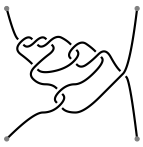
$3\,1(2\,1\,1(2\,0))$
x



$3\,1(2\,1(2\,1))$
x

$3\,1(2\,1(2\,0))1$
z

$3\,1(2\,1)3$
z



$3\,1(2\,1)2\,1$
x

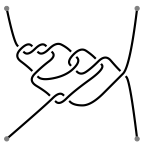
$3\,1(2\,1)(3\,0)$
e

$3\,1(2\,1)\overline{(2\,1\,0)}$
e

$3\,1(2\,1)(2\,1\,0)$
e

$3\,1(2\,1)\overline{(3\,0)}$
e

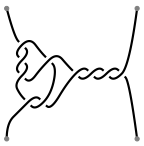
$3\,1(2\,1)(2\,1)$
e



$3\,1(2\,1)(2\,0)1$
e

$3\,1(2\,1)(2\,0)\overline{1}$
e

$3\,1(2\,1)\overline{(2\,0)1}$
e



$3\,1(2\,0)4$
y

$3\,1(2\,0)3\,1$
y

$3\,1(2\,0)2\,2$
x

$3\,1(2\,0)2\,1\,1$
z

$3\,1(2\,0)\overline{4}$
y

$3\,1(2\,0)(4\,0)$
e

$3\,1(2\,0)\overline{(3\,1\,0)}$
e

$3\,1(2\,0)(3\,1\,0)$
e

$3\,1(2\,0)\overline{(4\,0)}$
e

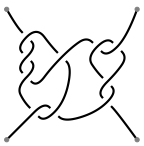
$3\,1(2\,0)(3\,1)$
e

$3\,1(2\,0)(3\,0)1$
e

$3\,1(2\,0)(3\,0)\overline{1}$
e

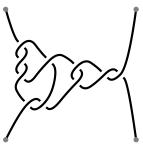
$3\,1(2\,0)\overline{(2\,1\,1)}$
e

$3\,1(2\,0)\overline{(2\,1\,0)1}$
e



$3\,1(2\,0)(2\,2\,0)$
e

$3\,1(2\,0)\overline{(2\,1\,1\,0)}$
e



$3\,1(2\,0)(2\,2)$
e

$3\,1(2\,0)(2\,1\,1\,0)$
e

$3\,1(2\,0)\overline{(2\,2\,0)}$
e

$3\,1(2\,0)(2\,1\,1)$
e

$3\,1(2\,0)(2\,1\,0)1$
e

$3\,1(2\,0)\overline{(3\,1)}$
e

$3\,1(2\,0)\overline{(3\,0)}1$
e

$3\,1(2\,0)\overline{(3\,0)1}$
e

$3\,1(2\,0)(2\,1)1$
e

$3\,1(2\,0)(2\,0)2$
e

$3\,1(2\,0)(2\,0)\overline{2}$
e

$3\,1(2\,0)(2\,0)(2\,0)$
e

$3\,1(2\,0)(2\,0)\overline{(2\,0)}$
e

$3\,1(2\,0)\overline{(2\,2)}$
e

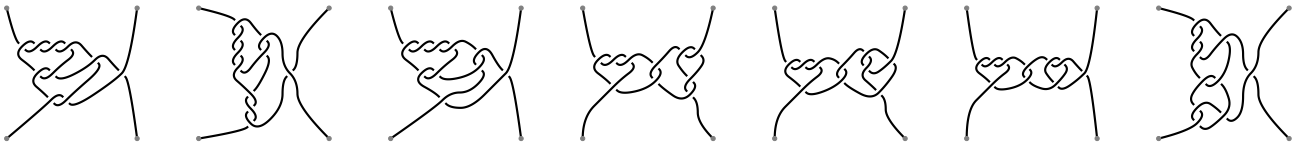
$3\,1(2\,0)\overline{(2\,1)1}$
e

$3\,1(2\,0)\overline{(2\,0)}2$
e

Tangles 1334 – 1396 (with loops)

$3\,1(2\,0)\overline{(2\,0)2}$	$3\,1(2\,0)\overline{(2\,0)}(2\,0)$	$3\,1(2\,0)\overline{(2\,0)(2\,0)}$	$4(2\,2)1\,1$	$4(2\,1)1\,2$	$4(2\,1)1\,1\,1$	$4(2\,1)1(2\,0)$
e	e	e	y	z	x	e

$4(2\,0)1\,3$	$4(2\,0)1\,2\,1$	$4(2\,0)1\,1\,2$	$4(2\,0)1\,1\,1\,1$	$4(2\,0)1(3\,0)$	$4(2\,0)1(2\,1)$	$4(2\,0)1(2\,1\,0)$
y	y	x	z	e	e	e

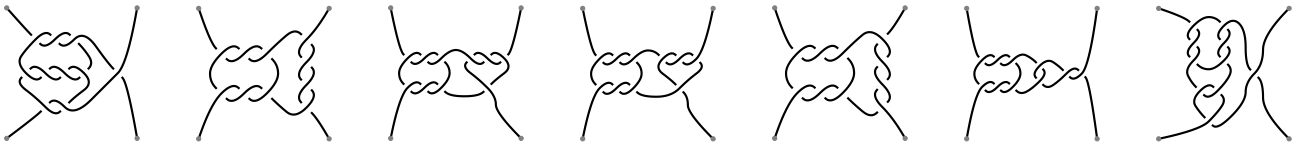


$4(2\,0)1(2\,0)1$	$4(2\,0)\overline{3\,1}$	$4(2\,0)(2\,0)1\,1$	$3\,1(2(2\,2\,0))$	$3\,1(2(2\,1\,1\,0))$	$3\,1(2(2\,1\,1))$	$3\,1(2(2\,1\,0))1$
e	y	e	x	x	x	z

$3\,1(2\overline{(3\,0)})1$	$3\,1(2\overline{(3\,0)})\overline{1}$	$3\,1(2\overline{(2\,0)}2)$	$3\,1(2\overline{(2\,0)}1)1$	$3\,1(2\overline{(2\,0)}0)2$	$3\,1(2\overline{(2\,0)}0)\overline{2}$	$3\,1(2\overline{(2\,0)}0)(2\,0)$
z	z	$z\rho$	$z\rho$	$z\rho$	$z\rho$	x

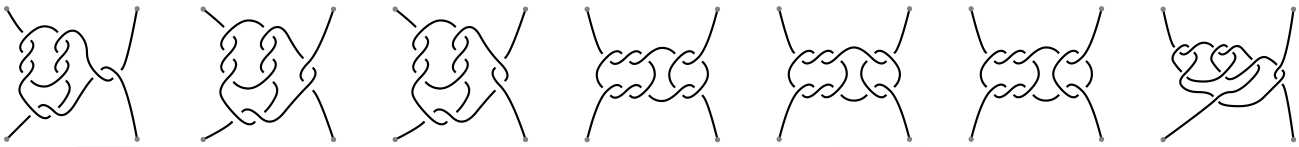
$3\,1(2\overline{(2\,0)}0)\overline{(2\,0)}$	$4(2\overline{(2\,0)}0)1\,1$	$3\overline{(5\,0)}(2\,0)$	$3(4(2\,1))$	$3(4(2\,0))1$	$3(4(2\,0))\overline{1}$	$3(4\overline{(2\,0)})\overline{1}$
x	$z\rho$	e	x	z	z	z

$3(3\,2\,0)(2\,0)$	$3(3\,2\,0)\overline{(2\,0)}$	$3(3\,2)(2\,0)$	$3(3\,2)\overline{(2\,0)}$	$3(3\,1(2\,1))$	$3(3\,1(2\,0))1$	$3(3\,1(2\,0))\overline{1}$
e	e	x	x	x	z	z



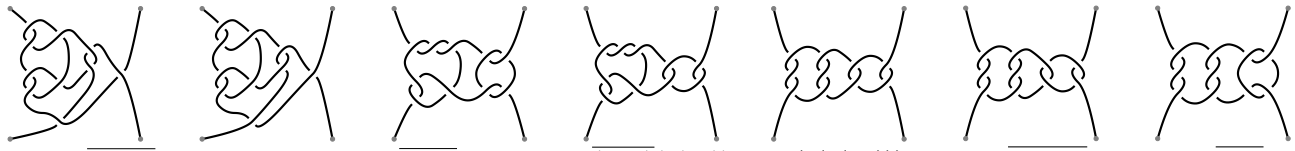
$3\overline{(4(2\,0))}1$	$3(3\,0)(4\,0)$	$3(3\,0)\overline{(3\,1\,0)}$	$3(3\,0)(3\,1\,0)$	$3(3\,0)\overline{(4\,0)}$	$3(3\,0)(2\,2)$	$3(3\,0)(2\,1)1$
z	x	x	x	x	x	z

$3(3\,0)(2\,0)2$	$3(3\,0)(2\,0)\overline{2}$	$3(3\,0)(2\,0)(2\,0)$	$3(3\,0)(2\,0)\overline{(2\,0)}$	$3(3\,0)\overline{(2\,2)}$	$\overline{3(3\,0)}(2\,0)1\,1$	$3(3\,0)\overline{(2\,0)}2$
y	y	e	e	x	y	y



$3(3\,0)\overline{(2\,0)2}$	$3(3\,0)\overline{(2\,0)}(2\,0)$	$3(3\,0)\overline{(2\,0)(2\,0)}$	$3(3\,0)(2(2\,0)0)$	$3(3\,0)\overline{(2(2\,0)0)}$	$3(3\,0)(2\overline{(2\,0)}0)$	$2\,1(2\,1\,1)1(2\,0)$
y	e	e	x	x	$z\rho$	x

Tangles 1397 – 1459 (with loops)



$2\,1(2\,1\,0)\overline{(2\,0)1\,1}$ y | $2\,1(2\,1\,0)(2\,0)1\,1$ y | $3\overline{(2\,1\,0)}(2(2\,0)0)$ x | $3\overline{(2\,1\,0)}(2(2\,0))$ x | $3(3(2(2\,0)))$ x | $3(3\overline{(2(2\,0))})$ x | $3(3(2\overline{(2\,0)}0))$ $z\rho$

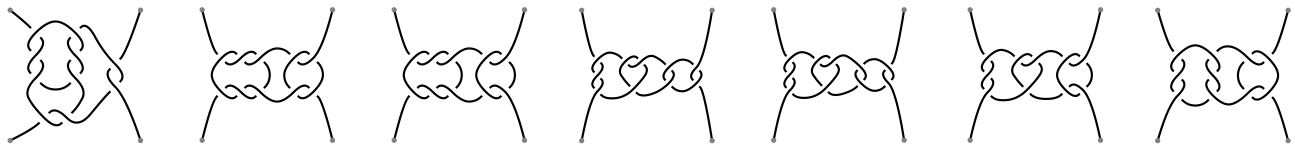
$3(3(2\overline{(2\,0)}))$ x | $3(2\,2\,1\,0)(2\,0)$ e | $3(2\,2\,1\,0)\overline{(2\,0)}$ e | $3(2\,2\,1)(2\,0)$ e | $3(2\,2\,1)\overline{(2\,0)}$ e | $2\,1(2\,1\,1\,0)1(2\,0)$ e | $3(2\,1\,2(2\,0))$ x

$3(2\,1\,2\overline{(2\,0)})$ x | $3(2\,1\,1\,1(2\,0))$ x | $3(2\,1\,1\,1\overline{(2\,0)})$ x | $3(2\,1\,1\,0)(2\,1)$ e | $3(2\,1\,1\,0)(2\,0)1$ e | $3(2\,1\,1\,0)(2\,0)\overline{1}$ e | $3(2\,1\,1\,0)\overline{(2\,1)}$ e

$3(2\,1\,1\,0)\overline{(2\,0)1}$ e | $3(2\,1\,1)(2\,1)$ e | $3(2\,1\,1)(2\,0)1$ e | $3(2\,1\,1)(2\,0)\overline{1}$ e | $3(2\,1\,1)\overline{(2\,0)1}$ e | $3(2\,1\,0)(2(2\,0)0)$ e | $3(2\,1\,0)(2(2\,0))$ e

$3(2\,1\,0)\overline{(2(2\,0)0)}$ e | $3(2\,1\,0)\overline{(2(2\,0))}$ e | $3(2\,1\,0)(2\overline{(2\,0)}0)$ y | $3(2\,1\,0)(2\overline{(2\,0)})$ e | $3\overline{(3\,0)}(4\,0)$ e | $3\overline{(3\,0)}(3\,1\,0)$ e | $3\overline{(3\,0)}(2\,2)$ e

$3\overline{(3\,0)}(2\,1)1$ e | $3\overline{(3\,0)}(2\,0)2$ e | $3\overline{(3\,0)}(2\,0)\overline{2}$ e | $3\overline{(3\,0)}(2\,0)(2\,0)$ e | $3\overline{(3\,0)}(2\,0)\overline{(2\,0)}$ e | $\overline{3}(3\,0)(2\,0)1\,1$ e | $3\overline{(3\,0)(2\,0)}(2\,0)$ e



$3\overline{(3\,0)(2\,0)(2\,0)}$ e | $3\overline{(3\,0)}(2(2\,0)0)$ e | $3\overline{(3\,0)}(2\overline{(2\,0)}0)$ $\overline{zy}$ | $3(2\,1(2(2\,0)))$ x | $3(2\,1\overline{(2(2\,0))})$ x | $3(2\,1(2\overline{(2\,0)}0))$ x | $3(\overline{3}(\overline{2}(2\,0)0))$ $\overline{zx}$

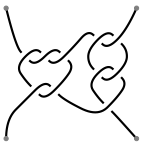
$3(2\,1(2\overline{(2\,0)}))$ x | $3(2\,1)2(2\,0)$ x | $3(2\,1)2\overline{(2\,0)}$ x | $3(2\,1)(2(2\,0)0)$ e | $3(2\,1)(2(2\,0))$ e | $3(2\,1)\overline{(2(2\,0)0)}$ e | $3(2\,1)\overline{(2(2\,0))}$ e

$3(2\,1)(2\overline{(2\,0)}0)$ y | $3(2\,1)(2\overline{(2\,0)})$ e | $3(2\,0)2(2\,1)$ x | $3(2\,0)2(2\,0)1$ z | $3(2\,0)2(2\,0)\overline{1}$ z | $3(2\,0)2\overline{(2\,0)1}$ z | $3(2\,0)\overline{(2\,1\,0)}(2\,0)$ e

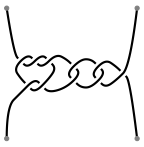
Tangles 1460 – 1522 (with loops)

$3(2\,0)(2\,1\,0)(2\,0)$
e

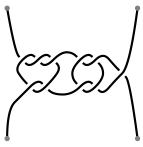
$3(2\,0)(2\,1\,0)\overline{(2\,0)}$
e



$3(2\,0)(2(2\,1)0)$
e



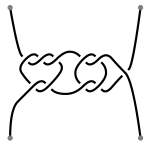
$3(2\,0)(2(2\,1))$
e



$3(2\,0)(2(2\,0)1)$
e

$3(2\,0)(2(2\,0)0)1$
e

$3(2\,0)(2(2\,0)0)\overline{1}$
e

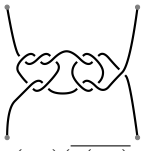


$3(2\,0)(2(2\,0)\overline{1})$
e

$3(2\,0)(2(2\,0))1$
e

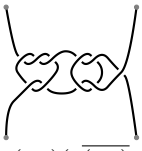
$3(2\,0)(2(2\,0))\overline{1}$
e

$3(2\,0)(2(2\,0)1\,0)$
e



$3(2\,0)(\overline{2(2\,0)}1)$
e

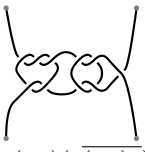
$3(2\,0)\overline{(2(2\,0)0)}1$
e



$3(2\,0)(2\overline{(2\,0)}1)$
z

$3(2\,0)(2\overline{(2\,0)}0)1$
x

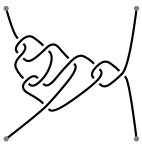
$3(2\,0)(2\overline{(2\,0)}0)\overline{1}$
x



$3(2\,0)(2\overline{(2\,0)1})$
z

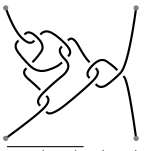
$3(2\,0)(2\overline{(2\,0)})\overline{1}$
e

$2\,1(2\,1)1\,1(2\,0)$
x

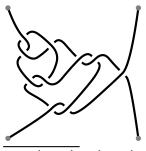


$2\,1(2\,0)1\,1(2\,1)$
x

$2\,1(2\,0)1\,1(2\,0)1$
z



$\overline{2\,1(2\,0)}2(2\,1)$
x



$\overline{2\,1(2\,0)}2(2\,0)1$
z

$3\overline{(2\,0)}2(2\,1)$
x

$3\overline{(2\,0)}2(2\,0)1$
z

$3\overline{(2\,0)}2(2\,0)\overline{1}$
z

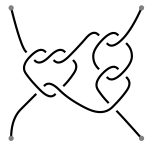
$3\overline{(2\,0)}2\overline{(2\,0)1}$
z

$3\overline{(2\,0)(2\,1\,0)(2\,0)}$
e

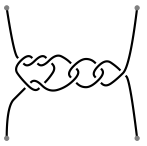
$3\overline{(2\,0)(2\,1\,0)(2\,0)}$
e

$3\overline{(2\,0)}(2\,1\,0)(2\,0)$
e

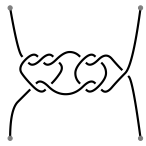
$3\overline{(2\,0)}(2\,1\,0)\overline{(2\,0)}$
e



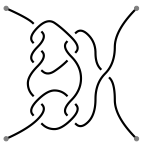
$3\overline{(2\,0)}(2(2\,1)0)$
e



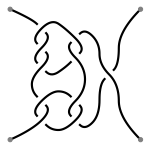
$3\overline{(2\,0)}(2(2\,1))$
e



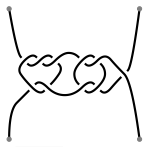
$3\overline{(2\,0)}(2(2\,0)1)$
e



$3\overline{(2\,0)}(2(2\,0)0)1$
e



$3\overline{(2\,0)}(2(2\,0)0)\overline{1}$
e

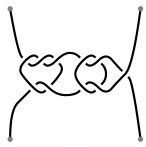


$3\overline{(2\,0)}(2(2\,0)\overline{1})$
e

$3\overline{(2\,0)}(2(2\,0))1$
e

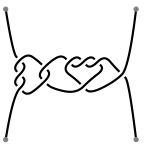
$3\overline{(2\,0)}(2(2\,0))\overline{1}$
e

$3\overline{(2\,0)}(2(2\,0)1\,0)$
e



$3\overline{(2\,0)}(2\overline{(2\,0)}1)$
z

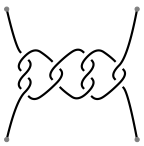
$3\overline{(2\,0)}(2\overline{(2\,0)}0)1$
x



$3(2(3\,1\,1))$
x

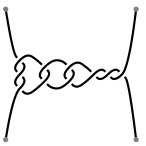
$3(2(3\,1\,0))1$
z

$3(2\overline{(4\,0)})1$
z



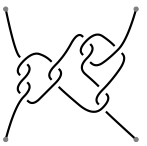
$3(2(3(2\,0)))$
x

$3(2(3\overline{(2\,0)}))$
x



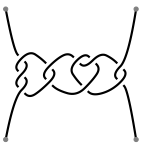
$3(2(2\,3))$
x

$3(2(2\,2))1$
z

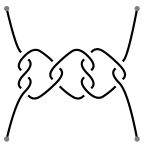


$3(2(2\,1\,2\,0))$
x

$3(2(2\,1\,1\,1\,0))$
x



$3(2(2\,1(2\,0)))$
x



$3(2\overline{(3(2\,0))})$
x

$3(2(2\,1\overline{(2\,0)}))$
x

$3(2(2\,1)(2\,0))$
x

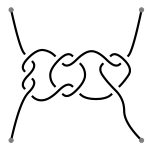
$3(2(2\,1)\overline{(2\,0)})$
x

$3(2(2\,1))2$
y

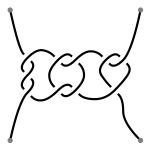
$3(2(2\,1))(2\,0)$
e

$3(2(2\,1))\overline{(2\,0)}$
e

$3(2(2\,0)(3\,0))$
$z\rho$



$3(2(2\,0)\overline{(2\,1\,0)})$
$z\rho$



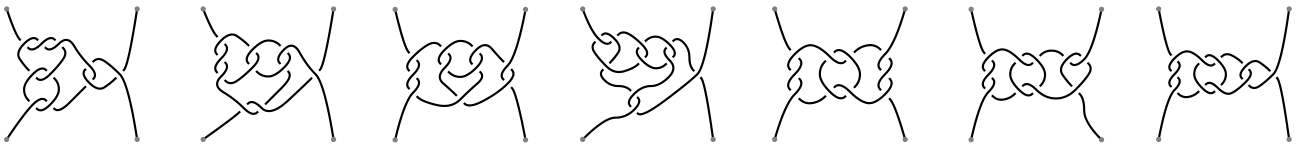
$3(2(2\,0)(2\,1\,0))$
x

$3(2(2\,0)\overline{(3\,0)})$
x

Tangles 1523 – 1585 (with loops)

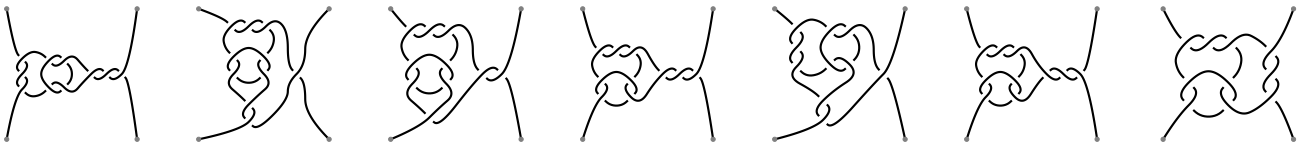
$3(2(2\,0)(2\,1))$	$3(2(2\,0)(2\,0))1$	$3(2(2\,0)(2\,0))\overline{1}$	$3(2(2\,0)\overline{(2\,0)})\overline{1}$	$3(2(2\,0))3$	$3(2(2\,0))2\,1$	$3(2(2\,0))\overline{3}$
x	z	z	z	z	x	z

$3(2(2\,0))(3\,0)$	$3(2(2\,0))\overline{(2\,1\,0)}$	$3(2(2\,0))(2\,1\,0)$	$3(2(2\,0))\overline{(3\,0)}$	$3(2(2\,0))(2\,1)$	$3(2(2\,0))(2\,0)1$	$3(2(2\,0))(2\,0)\overline{1}$
e	e	e	e	e	e	e



$3(2(2\,0))\overline{(2\,1)}$	$3(2(2\,0))\overline{(2\,0)}1$	$3(2(2\,0)1(2\,0))$	$\overline{2\,1}(2(2\,0))2\,1$	$3(\overline{2(2\,0)}(3\,0))$	$3(\overline{2(2\,0)}(2\,1\,0))$	$3(\overline{2(2\,0)}(2\,1))$
e	e	x	x	$z\rho$	x	x

$3(\overline{2(2\,0)}(2\,0))1$	$3(\overline{2(2\,0)})3$	$3(\overline{2(2\,0)})2\,1$	$3(\overline{2(2\,0)})(3\,0)$	$3(\overline{2(2\,0)})(2\,1\,0)$	$3(\overline{2(2\,0)})(2\,1)$	$3(\overline{2(2\,0)})(2\,0)1$
z	z	x	e	e	e	e

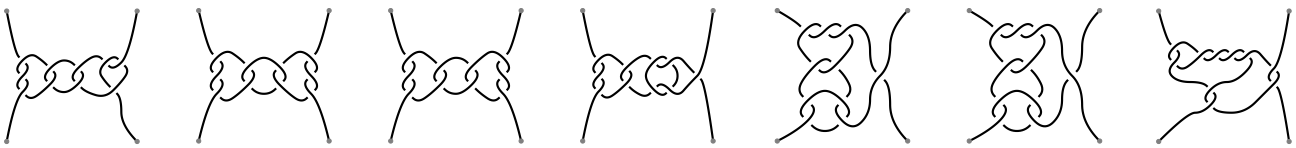


$3(2\overline{(2\,0)}3)$	$3(2\overline{(2\,0)}2)1$	$3(2\overline{(2\,0)}1)2$	$3(2\overline{(2\,0)}0)3$	$3(2\overline{(2\,0)}0)2\,1$	$3(2\overline{(2\,0)}0)\overline{3}$	$3(2\overline{(2\,0)}0)(3\,0)$
$z\rho$	$z\rho$	$z\rho$	$z\rho$	$z\rho$	$z\rho$	x

$3(2\overline{(2\,0)}0)(2\,1\,0)$	$3(2\overline{(2\,0)}0)\overline{(3\,0)}$	$3(2\overline{(2\,0)}0)(2\,1)$	$3(2\overline{(2\,0)}0)(2\,0)1$	$3(2\overline{(2\,0)}0)(2\,0)\overline{1}$	$2\,1(2\overline{(2\,0)}1)1\,1$	$2\,1(2\overline{(2\,0)}0)1\,2$
x	x	x	z	z	$z\rho$	$z\rho$

$2\,1(2\overline{(2\,0)}0)1\,1\,1$	$2\,1(2\overline{(2\,0)}0)1(2\,0)$	$\overline{2\,1}(\overline{2}(2\,0)0)2\,1$	$3(2\overline{(2\,0)})3$	$3(2\overline{(2\,0)})2\,1$	$3(2\overline{(2\,0)})\overline{3}$	$3(2\overline{(2\,0)})(3\,0)$
$z\rho$	x	$z\rho$	z	x	z	e

$3(2\overline{(2\,0)})(2\,1\,0)$	$3(2\overline{(2\,0)})\overline{(3\,0)}$	$3(2\overline{(2\,0)})(2\,1)$	$3(2\overline{(2\,0)})(2\,0)1$	$3(2\overline{(2\,0)})(2\,0)\overline{1}$	$3(2(2(3\,0)))$	$3(2(2\overline{(2\,1\,0)}))$
e	e	e	e	e	$z\rho$	$z\rho$



$3(2(2(2\,1\,0)))$	$3(2\overline{(2(3\,0))})$	$3(2(2\overline{(3\,0)}))$	$3(2(2\overline{(2\,0)}1))$	$3(2(2\overline{(2\,0)}0))1$	$3(2(2\overline{(2\,0)}0))\overline{1}$	$2\,4\,2(2\,0)$
x	$\overline{zx}$	x	x	z	z	x

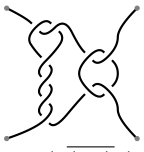
Tangles 1586 – 1648 (with loops)

$2\,4\,2\overline{(2\,0)}$
x

$2\,4\,1\,1(2\,0)$
x

$2\,4(2(2\,0))$
x

$2\,4\overline{(2(2\,0))}$
x



$2\,4(2\overline{(2\,0)}0)$
$z\rho$

$2\,4(2\overline{(2\,0)})$
x

$2\,3\,2(2\,1)$
x

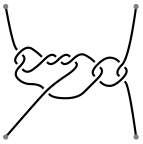
$2\,3\,2(2\,0)1$
z

$2\,3\,2(2\,0)\overline{1}$
z

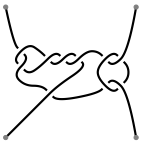
$2\,3\,2\overline{(2\,0)1}$
z

$2\,3\,1\,1(2\,1)$
x

$2\,3\,1\,1(2\,0)1$
z



$2\,3\,1(2(2\,0))$
x

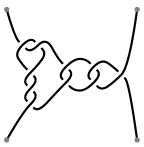


$2\,3\,1(2\overline{(2\,0)}0)$
$z\rho$

$2\,3\overline{(2\,1\,0)}(2\,0)$
e

$2\,3(2\,1\,0)(2\,0)$
e

$2\,3(2\,1\,0)\overline{(2\,0)}$
e



$2\,3(2(2\,1))$
x

$2\,3(2(2\,0))1$
z

$2\,3(2(2\,0))\overline{1}$
z

$2\,3(2\overline{(2\,0)}1)$
$z\rho$

$2\,3(2\overline{(2\,0)}0)1$
$z\rho$

$2\,3(2\overline{(2\,0)}0)\overline{1}$
$z\rho$

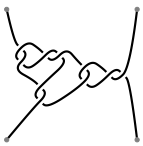
$2\,3(2\overline{(2\,0)})\overline{1}$
z

$2\,2\,4(2\,0)$
x

$2\,2\,4\overline{(2\,0)}$
x

$2\,2\,3\,1(2\,0)$
x

$2\,2\,2\overline{(4\,0)}$
x



$2\,2\,2(2\,2)$
x

$2\,2\,2(2\,1)1$
z

$2\,2\,2(2\,0)2$
y

$2\,2\,2(2\,0)\overline{2}$
y

$2\,2\,2(2\,0)(2\,0)$
e

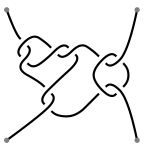
$2\,2\,2(2\,0)\overline{(2\,0)}$
e

$2\,2\,2\overline{(2\,0)}2$
y

$2\,2\,2\overline{(2\,0)}2$
y

$2\,2\,2\overline{(2\,0)}(2\,0)$
e

$2\,2\,2\overline{(2\,0)(2\,0)}$
e



$2\,2\,2(2\overline{(2\,0)}0)$
$z\rho$

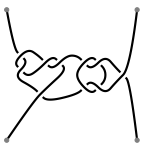
$2\,2\,1\,3\overline{(2\,0)}$
x

$2\,2\,1\,1\overline{(4\,0)}$
x

$2\,2\,2(2\,0)1\,1$
y

$2\,2\,1\,1(2\overline{(2\,0)}0)$
$z\rho$

$2\,2\,1\overline{(3\,0)}(2\,0)$
e

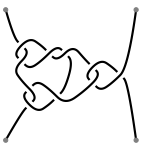


$2\,2\,1(2\overline{(2\,0)}1)$
$z\rho$

$2\,2\,1(2\overline{(2\,0)}0)1$
$z\rho$

$2\,2(4\overline{(2\,0)})$
x

$2\,2(3\,1\overline{(2\,0)})$
x

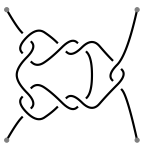


$2\,2\overline{(2\,1\,0)}(2\,1)$
e

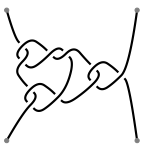
$2\,2\overline{(2\,1\,0)}(2\,0)1$
e

$2\,2(2\,2\,0)(2\,0)$
x

$2\,2(2\,2\,0)\overline{(2\,0)}$
x



$2\,2\overline{(2\,2\,0)}(2\,0)$
e



$2\,2(2\,1\,0)(2\,1)$
e

$2\,2(2\,1\,0)(2\,0)1$
e

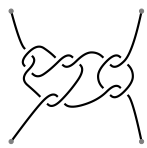
$2\,2(2\,1\,0)(2\,0)\overline{1}$
e

$2\,2(2\,1\,0)\overline{(2\,1)}$
e

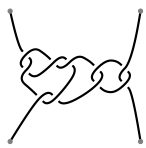
$2\,2(2\,1\,0)\overline{(2\,0)1}$
e

$2\,2(2\,0)2(2\,0)$
x

$2\,2(2\,0)2\overline{(2\,0)}$
x



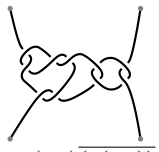
$2\,2(2\,0)(2(2\,0)0)$
e



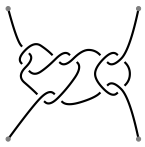
$2\,2(2\,0)(2(2\,0))$
e

$2\,2(2\,0)\overline{(2(2\,0)0)}$
e

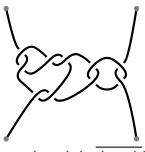
Tangles 1649 – 1711 (with loops)



$2\,2(2\,0)\overline{(2(2\,0))}$
e



$2\,2(2\,0)(2\overline{(2\,0)}0)$
y



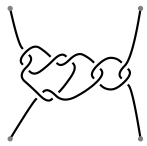
$2\,2(2\,0)(2\overline{(2\,0)})$
e

$2\,1\,1(2\,0)1\,1(2\,0)$
x

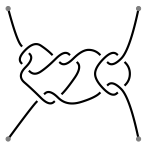
$\overline{2\,1\,1(2\,0)}2(2\,0)$
x

$2\,2\overline{(2\,0)}2(2\,0)$
x

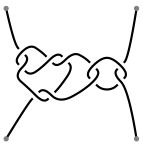
$2\,2\overline{(2\,0)}2\overline{(2\,0)}$
x



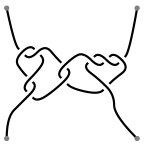
$2\,2\overline{(2\,0)}(2(2\,0))$
e



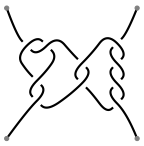
$2\,2\overline{(2\,0)}(2\overline{(2\,0)}0)$
y



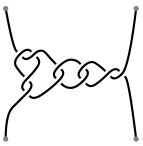
$2\,2\overline{(2\,0)}(2\overline{(2\,0)})$
e



$2\,2(2\overline{(3\,1\,0)})$
x

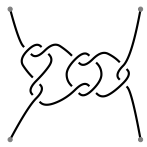


$2\,2(2\overline{(4\,0)})$
x

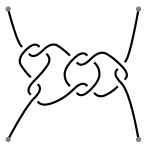


$2\,2(2(2\,2))$
x

$2\,2(2(2\,1))1$
z



$2\,2(2(2\,0)(2\,0))$
x



$2\,2(2(2\,0)\overline{(2\,0)})$
x

$2\,2(2(2\,0))2$
y

$2\,2(2(2\,0))\overline{2}$
y

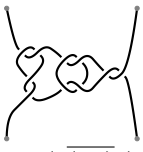
$2\,2(2(2\,0))(2\,0)$
e

$2\,2(2(2\,0))\overline{(2\,0)}$
e

$2\,2(\overline{(2\,0)}(2\,0))$
x

$2\,2\overline{(2(2\,0))}2$
y

$2\,2\overline{(2(2\,0))}(2\,0)$
e



$2\,2(2\overline{(2\,0)}2)$
$z\rho$

$2\,2(2\overline{(2\,0)}1)1$
$z\rho$

$2\,2(2\overline{(2\,0)}0)2$
$z\rho$

$2\,2(2\overline{(2\,0)}0)\overline{2}$
$z\rho$

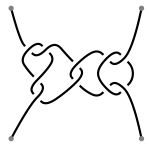
$2\,1\,1(2\overline{(2\,0)}0)1\,1$
$z\rho$

$2\,2(2\overline{(2\,0)})2$
y

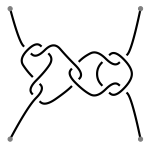
$2\,2(2\overline{(2\,0)})\overline{2}$
y

$2\,2(2\overline{(2\,0)})(2\,0)$
e

$2\,2(2\overline{(2\,0)})\overline{(2\,0)}$
e



$2\,2(2(2\overline{(2\,0)}0))$
x



$2\,2(\overline{2}(\overline{2}(2\,0)0))$
x

$2\,1\,4\overline{(2\,0)1}$
z

$2\,1\,3\overline{(2(2\,0))}$
x

$2\,1\,3(2\overline{(2\,0)}0)$
$z\rho$

$2\,1\,3(2\overline{(2\,0)})$
x

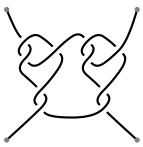
$2\,1\,2\,1\,2\overline{(2\,0)}$
x

$2\,1\,2\,1(2\overline{(2\,0)}0)$
$z\rho$

$2\,1\,2\overline{(4\,0)}1$
z

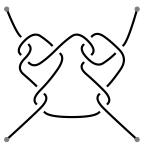
$2\,1\,2\overline{(4\,0)1}$
z

$2\,1\,2(3\overline{(2\,0)})$
x



$2\,1\,2(2\,1\,2\,0)$
$z\rho$

$2\,1\,2(2\,1\,1\,1\,0)$
x



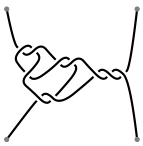
$2\,1\,2\overline{(2\,1\,2\,0)}$
$\overline{zx}$

$2\,1\,2\overline{(3(2\,0))}$
x

$2\,1\,2(2\,1\overline{(2\,0)})$
x

$2\,1\,2\overline{(2\,0)}3$
z

$2\,1\,2\overline{(2\,0)}2\,1$
x



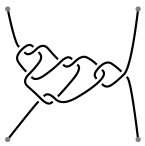
$2\,1\,2\overline{(2\,0)}3$
z

$2\,1\,2\overline{(2\,0)}(3\,0)$
e

$2\,1\,2\overline{(2\,0)(2\,1\,0)}$
e

$2\,1\,2\overline{(2\,0)}(2\,1\,0)$
e

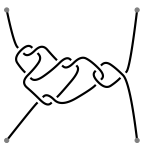
$2\,1\,2\overline{(2\,0)(3\,0)}$
e



$2\,1\,2\overline{(2\,0)}(2\,1)$
e

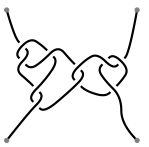
$2\,1\,2\overline{(2\,0)}(2\,0)1$
e

$2\,1\,2\overline{(2\,0)}(2\,0)\overline{1}$
e

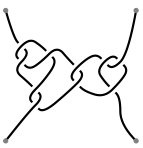


$2\,1\,2\overline{(2\,0)(2\,1)}$
e

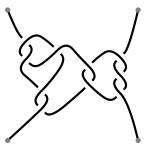
$2\,1\,2\overline{(2\,0)(2\,0)1}$
e



$2\,1\,2(2\overline{(2\,1\,0)})$
x

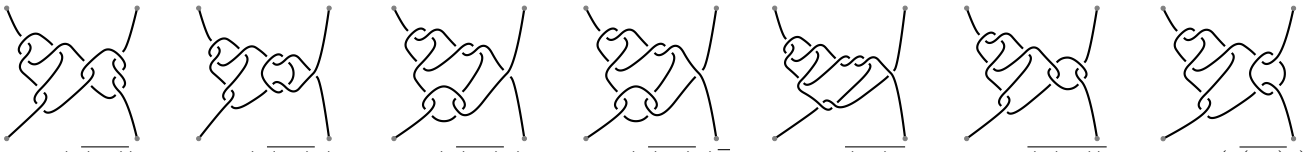


$2\,1\,2(2(2\,1\,0))$
x



$2\,1\,2\overline{(2(3\,0))}$
x

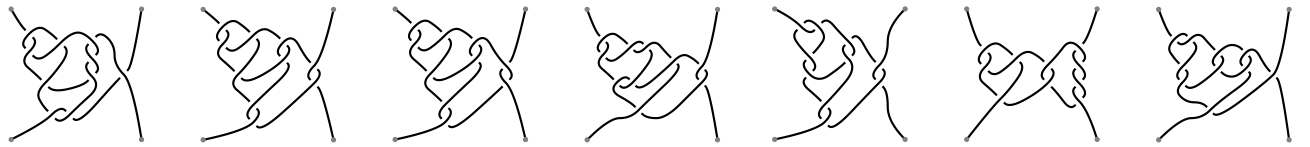
Tangles 1712 – 1774 (with loops)



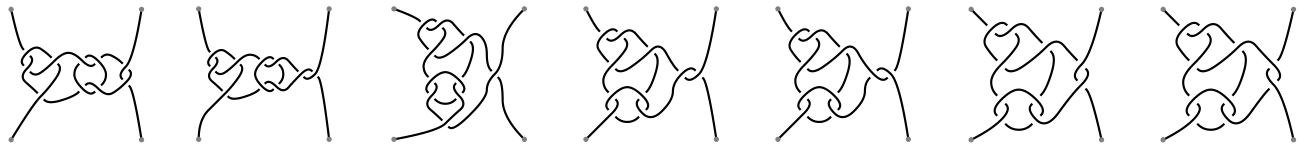
$2\,1\,2(2\overline{(3\,0)})$ x | $2\,1\,2(2\overline{(2\,0)}1)$ $z\rho$ | $2\,1\,2(2\overline{(2\,0)}0)1$ $z\rho$ | $2\,1\,2(2\overline{(2\,0)}0)\overline{1}$ $z\rho$ | $2\,1\,1\,3\overline{(2\,0)1}$ z | $2\,1\,1\,2\overline{(2(2\,0))}$ x | $2\,1\,1\,2(2\overline{(2\,0)}0)$ $z\rho$

$2\,1\,1\,2(2\overline{(2\,0)})$ x | $2\,1\,1\,1\,1\,2\overline{(2\,0)}$ x | $2\,1\,1\,1\,1(2\overline{(2\,0)}0)$ $z\rho$ | $2\,1\,1\,1\overline{(4\,0)}1$ z | $2\,1\,1\,1(2\,1\,1\,1\,0)$ $z\rho$ | $2\,1\,1\,1\overline{(2\,1\,2\,0)}$ $z\rho$ | $\overline{2\,1\,2(2\,0)}2\,1$ x

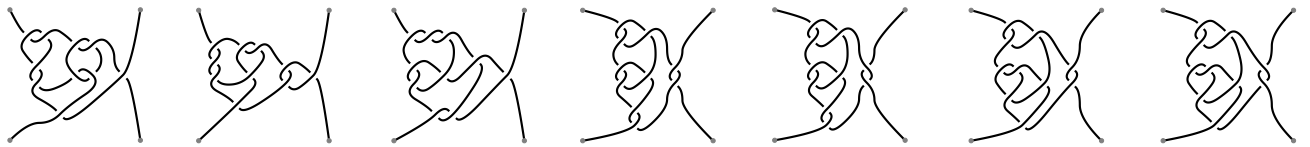
$2\,1\,1\,1(2\overline{(3\,0)})$ x | $2\,1\,1\,1(2\overline{(2\,0)}1)$ $z\rho$ | $2\,1\,1\,1(2\overline{(2\,0)}0)1$ $z\rho$ | $2\,1\,1(2\,1\,1\,0)(2\,0)$ x | $2\,1\,1(2\,1\,1\,0)\overline{(2\,0)}$ x | $2\,1\,1\overline{(3\,0)}(2\,1)$ e | $2\,1\,1\overline{(3\,0)}(2\,0)1$ e



$2\,1\,1\overline{(3\,0)}(2\,0)\overline{1}$ e | $2\,1\,1(2\,0)2(2\,0)$ x | $2\,1\,1(2\,0)2\overline{(2\,0)}$ x | $2\,2(2\,0)1\,1(2\,0)$ x | $\overline{2\,2(2\,0)}2(2\,0)$ x | $2\,1\,1(2\overline{(4\,0)})$ x | $2\,2(2(2\,0))1\,1$ y



$2\,1\,1(\overline{2(2\,0)}(2\,0))$ x | $2\,1\,1(2\overline{(2\,0)}2)$ $z\rho$ | $2\,1\,1(2\overline{(2\,0)}1)1$ $z\rho$ | $2\,1\,1(2\overline{(2\,0)}0)2$ $z\rho$ | $2\,1\,1(2\overline{(2\,0)}0)\overline{2}$ $z\rho$ | $2\,1\,1(2\overline{(2\,0)}0)(2\,0)$ x | $2\,1\,1(2\overline{(2\,0)}0)\overline{(2\,0)}$ x



$2\,2(2\overline{(2\,0)}0)1\,1$ $z\rho$ | $3(2\,1\,0)1(2\,1)$ e | $3(2\,1\,0)1(2\,0)1$ e | $2\,1(2\,1\,2)(2\,0)$ x | $2\,1(2\,1\,2)\overline{(2\,0)}$ x | $2\,1(2\,1\,1\,1)(2\,0)$ e | $2\,1(2\,1\,1\,1)\overline{(2\,0)}$ e

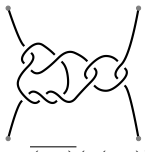
$3(2\,2\,0)1(2\,0)$ e | $2\,1(2\,1\,0)(4\,0)$ x | $2\,1(2\,1\,0)\overline{(3\,1\,0)}$ x | $2\,1(2\,1\,0)(3\,1\,0)$ x | $2\,1(2\,1\,0)\overline{(4\,0)}$ x | $2\,1(2\,1\,0)(2\,2)$ x | $2\,1(2\,1\,0)(2\,1)1$ z

$2\,1(2\,1\,0)(2\,0)2$ y | $2\,1(2\,1\,0)(2\,0)\overline{2}$ y | $2\,1(2\,1\,0)(2\,0)(2\,0)$ e | $2\,1(2\,1\,0)(2\,0)\overline{(2\,0)}$ e | $2\,1(2\,1\,0)\overline{(2\,2)}$ x | $2\,1(2\,1\,0)\overline{(2\,1)1}$ z | $2\,1(2\,1\,0)\overline{(2\,0)}2$ y

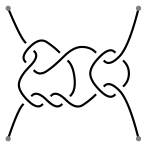
$2\,1(2\,1\,0)\overline{(2\,0)2}$ y | $2\,1(2\,1\,0)\overline{(2\,0)}(2\,0)$ e | $2\,1(2\,1\,0)\overline{(2\,0)(2\,0)}$ e | $2\,1(2\,1\,0)\overline{(2(2\,0)0)}$ x | $2\,1(2\,1\,0)(2\overline{(2\,0)}0)$ $z\rho$ | $3(3\,1)1(2\,0)$ x | $\overline{3(3\,0)}(2\,1)1$ z

Tangles 1775 – 1837 (with loops)

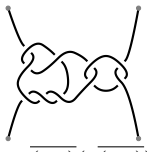
$3(30)(20)11$
y



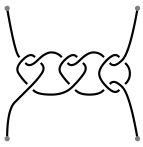
$21\overline{(30)}(2(20))$
x



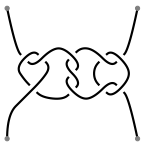
$21\overline{(30)}(2\overline{(20)}0)$
$z\rho$



$21\overline{(30)}(2\overline{(20)})$
x



$21(21(2\overline{(20)}0))$
$z\rho$

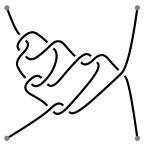


$21(\overline{3}(\overline{2}(20)0))$
$z\rho$

$21(21)2(20)$
x

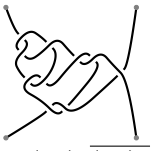
$21(21)2\overline{(20)}$
x

$21(20)2(21)$
x



$21(20)2(20)1$
z

$21(20)2(20)\overline{1}$
z



$21(20)2\overline{(20)1}$
z

$21(20)\overline{(210)}(20)$
e

$21(20)\overline{(210)(20)}$
e

$21(20)(210)(20)$
e

$21(20)(210)\overline{(20)}$
e

$3(21)11(20)$
x

$3(20)11(21)$
x

$3(20)11(20)1$
z

$3(20)1(2(20))$
e

$3(20)1(2(20)0)$
e

$3(20)1\overline{(2(20)0)}$
e

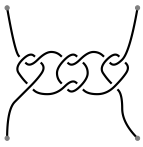
$3(20)1(\overline{2}(20)0)$
z

$\overline{3(20)}2(21)$
x

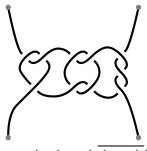
$\overline{3(20)}2(20)1$
z

$\overline{3(20)}(210)(20)$
e

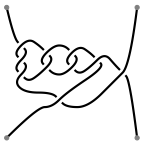
$21(2(2110))$
x



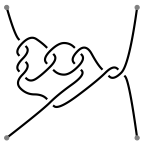
$21(2(20)(210))$
$z\rho$



$21(2(20)\overline{(30)})$
$z\rho$



$3(2(21))11$
y

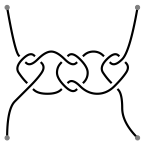


$3(2(20))12$
z

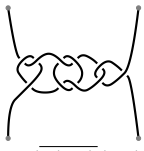
$3(2(20))111$
x

$3(2(20))1(20)$
e

$21(\overline{2(21)}(20))$
x

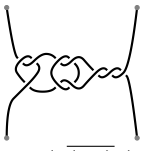


$21(\overline{2(20)}(210))$
$z\rho$



$21(\overline{2(20)}(21))$
x

$21(\overline{2(20)}(20))1$
z



$21(2\overline{(20)}3)$
$z\rho$

$21(2\overline{(20)}2)1$
$z\rho$

$21(2\overline{(20)}1)2$
$z\rho$

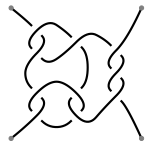
$21(2\overline{(20)}1)(20)$
x

$21(2\overline{(20)}1)\overline{(20)}$
x

$21(2\overline{(20)}0)3$
$z\rho$

$21(2\overline{(20)}0)21$
$z\rho$

$21(2\overline{(20)}0)\overline{3}$
$z\rho$



$21(2\overline{(20)}0)(30)$
x

$21(2\overline{(20)}0)\overline{(210)}$
x

$21(2\overline{(20)}0)(210)$
x

$21(2\overline{(20)}0)\overline{(30)}$
x

$3(2\overline{(20)}1)11$
$z\rho$

$3(2\overline{(20)}0)12$
$z\rho$

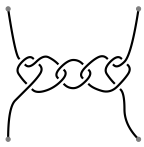
$3(2\overline{(20)}0)111$
$z\rho$

$\overline{3}(\overline{2}(20)0)21$
$z\rho$

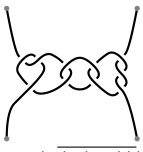
$\overline{3}(\overline{2}(20)0)(210)$
x

$\overline{3}(\overline{2}(20)0)(21)$
x

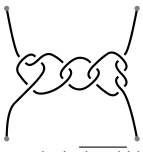
$\overline{3}(\overline{2}(20)0)(20)1$
z



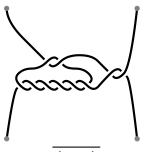
$21(2(2(210)))$
$z\rho$



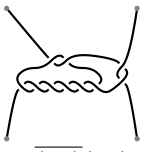
$21(2\overline{(2(30))})$
$z\rho$



$21(2(2\overline{(30)}))$
$z\rho$

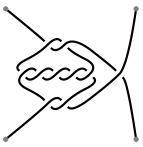


$2\overline{(60)}2$
y



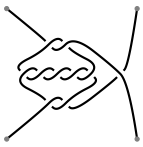
$2\overline{(60)}(20)$
e

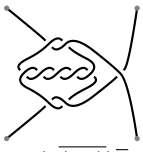
$2(5(21))$
$z\rho$



$2(5(20))1$
$z\rho$

Tangles 1838 – 1900 (with loops)


$2(5(2\,0))\overline{1}$
$z\rho$

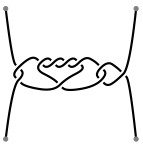

$2(5\overline{(2\,0)})\overline{1}$
$z\rho$

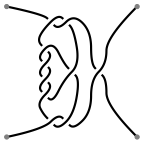
$2(4\,2(2\,0))$
$z\rho$

$2(4\,2\overline{(2\,0)})$
$z\rho$

$2(4\,1\,1(2\,0))$
$z\rho$

$2(4\,1\,1\overline{(2\,0)})$
$z\rho$

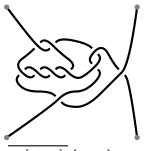

$2(4\,1(2\,1))$
$z\rho$


$2(4\,1(2\,0))1$
$z\rho$

$2(4\,1(2\,0))\overline{1}$
$z\rho$

$2(4\,0)(2\,0)(2\,0)$
e

$2(4\,0)(2\,0)\overline{(2\,0)}$
e

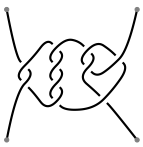

$\overline{2(4\,0)}(2\,0)1\,1$
e

$2(4\,0)\overline{(2\,0)}(2\,0)$
e

$2(4\,0)\overline{(2\,0)(2\,0)}$
e

$\overline{2(3\,1\,0)}2\,2$
x

$2(4(2\,2\,0))$
x

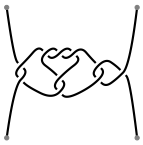

$2(4(2\,1\,1\,0))$
x

$2(4\overline{(2\,2\,0)})$
x

$2(4(2\,1\,1))$
x

$2(4(2\,1\,0))1$
z

$2(4\overline{(3\,0)})1$
z


$2(3\,2(2\,1))$
$z\rho$

$2(3\,2(2\,0))1$
$z\rho$

$2(3\,2(2\,0))\overline{1}$
$z\rho$

$2(3\,2\overline{(2\,0)})\overline{1}$
$z\rho$

$2(3\,1\,2(2\,0))$
$z\rho$

$2(3\,1\,2\overline{(2\,0)})$
$z\rho$

$2(3\,1\,1\,1(2\,0))$
$z\rho$

$2(3\,1\,1\,1\overline{(2\,0)})$
$z\rho$

$2(3\,1\,1(2\,1))$
$z\rho$

$2(3\,1\,1(2\,0))1$
$z\rho$

$2(3\,1\,1(2\,0))\overline{1}$
$z\rho$

$2(3\,1\,0)(2\,0)(2\,0)$
e

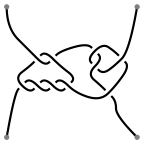
$2(3\,1\,0)(2\,0)\overline{(2\,0)}$
e

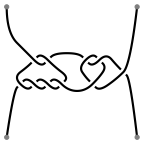
$2(3\,1\,0)\overline{(2\,0)}(2\,0)$
e

$2(3\,1\,0)\overline{(2\,0)(2\,0)}$
e

$\overline{2(4\,0)}2\,2$
x

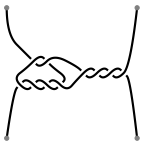
$\overline{2(4\,0)}2\,1\,1$
z


$\overline{2(4\,0)}(2\,1\,1\,0)$
e


$\overline{2(4\,0)}(2\,1\,1)$
e

$\overline{2(4\,0)}(2\,1\,0)1$
e

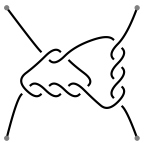
$\overline{2(4\,0)}(2\,1)1$
e

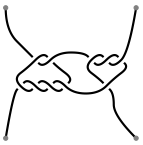

$2\overline{(4\,0)}4$
y

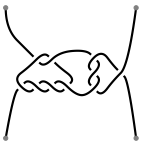
$2\overline{(4\,0)}3\,1$
y

$2\overline{(4\,0)}2\,2$
x

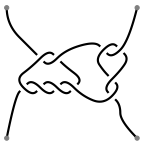
$2\overline{(4\,0)}2\,1\,1$
z

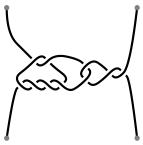

$2\overline{(4\,0)}(4\,0)$
e


$2\overline{(4\,0)}(3\,1\,0)$
e

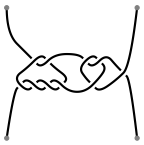

$2\overline{(4\,0)}(3\,1)$
e

$2\overline{(4\,0)}(3\,0)1$
e

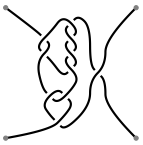

$2\overline{(4\,0)}(2\,2\,0)$
e


$2\overline{(4\,0)}(2\,2)$
e

$2\overline{(4\,0)}(2\,1\,1\,0)$
e


$2\overline{(4\,0)}(2\,1\,1)$
e

$2\overline{(4\,0)}(2\,1\,0)1$
e

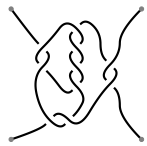

$2\overline{(4\,0)}(2\,1)1$
e

$2\overline{(4\,0)}(2\,0)2$
e

$2\overline{(4\,0)}(2\,0)(2\,0)$
e

$2\overline{(4\,0)}(2\,0)\overline{(2\,0)}$
e

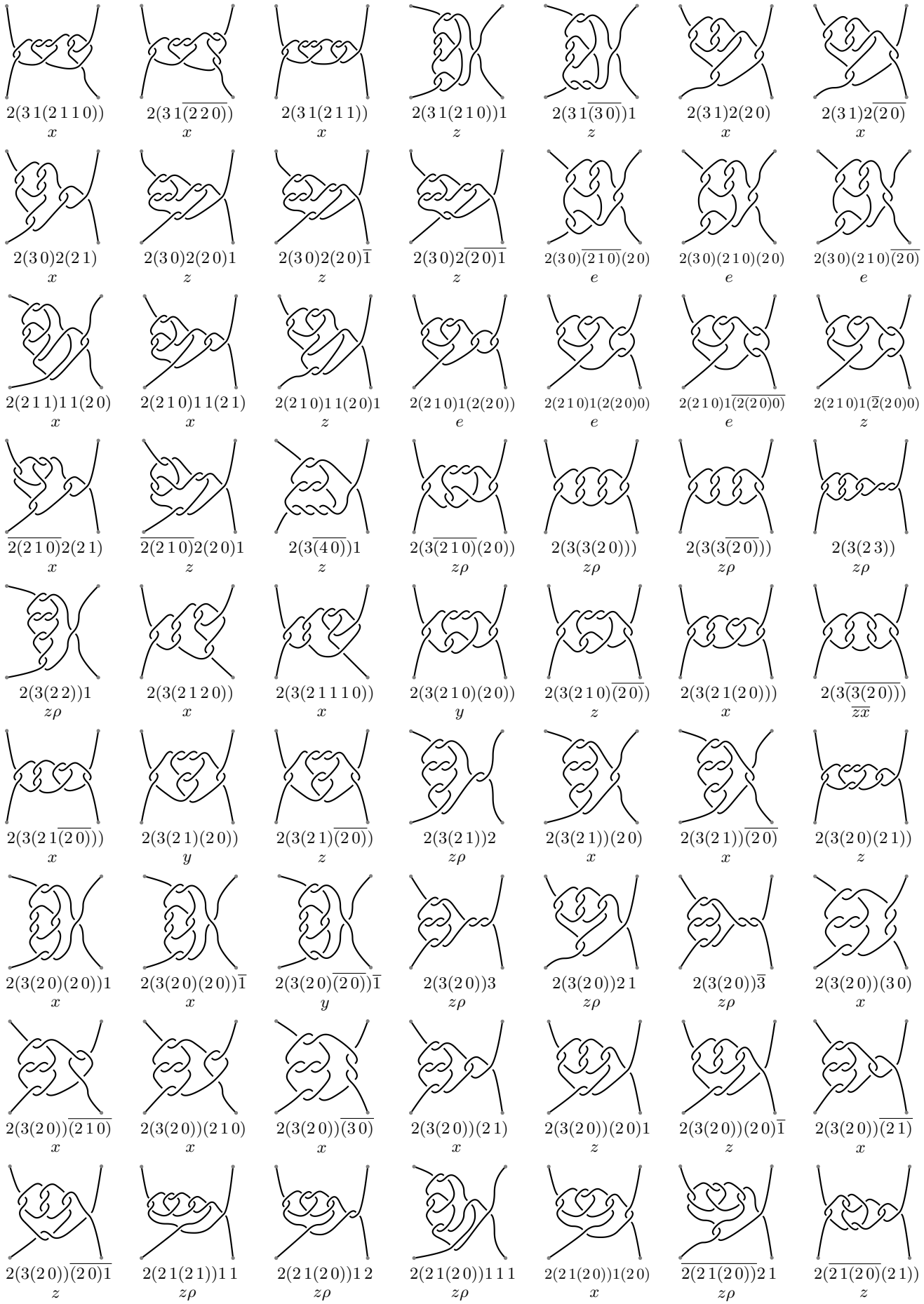
$\overline{2}(4\,0)(2\,0)1\,1$
e


$\overline{2(4\,0)(2\,0)}(2\,0)$
e

$\overline{2(4\,0)(2\,0)(2\,0)}$
e

$2(3\,1(2\,2\,0))$
x

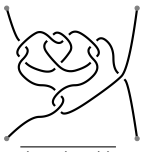
Tangles 1901 – 1963 (with loops)



$2(3\,1(2\,1\,1\,0))$	$2(3\,1\overline{(2\,2\,0)})$	$2(3\,1(2\,1\,1))$	$2(3\,1(2\,1\,0))1$	$2(3\,1\overline{(3\,0)})1$	$2(3\,1)2(2\,0)$	$2(3\,1)2\overline{(2\,0)}$
x	x	x	z	z	x	x
$2(3\,0)2(2\,1)$	$2(3\,0)2(2\,0)1$	$2(3\,0)2(2\,0)\overline{1}$	$2(3\,0)2\overline{(2\,0)1}$	$2(3\,0)\overline{(2\,1\,0)}(2\,0)$	$2(3\,0)(2\,1\,0)(2\,0)$	$2(3\,0)(2\,1\,0)\overline{(2\,0)}$
x	z	z	z	e	e	e
$2(2\,1\,1)1\,1(2\,0)$	$2(2\,1\,0)1\,1(2\,1)$	$2(2\,1\,0)1\,1(2\,0)1$	$2(2\,1\,0)1(2(2\,0))$	$2(2\,1\,0)1(2(2\,0)0)$	$2(2\,1\,0)1\overline{(2(2\,0)0)}$	$2(2\,1\,0)1(\overline{2}(2\,0)0)$
x	x	z	e	e	e	z
$\overline{2(2\,1\,0)}2(2\,1)$	$\overline{2(2\,1\,0)}2(2\,0)1$	$2(3\overline{(4\,0)})1$	$2(3\overline{(2\,1\,0)}(2\,0))$	$2(3(3(2\,0)))$	$2(3(3\overline{(2\,0)}))$	$2(3(2\,3))$
x	z	z	$z\rho$	$z\rho$	$z\rho$	$z\rho$
$2(3(2\,2))1$	$2(3(2\,1\,2\,0))$	$2(3(2\,1\,1\,1\,0))$	$2(3(2\,1\,0)(2\,0))$	$2(3(2\,1\,0)\overline{(2\,0)})$	$2(3(2\,1(2\,0)))$	$2(3\overline{(3(2\,0))})$
$z\rho$	x	x	y	z	x	$\overline{zx}$
$2(3(2\,1\overline{(2\,0)}))$	$2(3(2\,1)(2\,0))$	$2(3(2\,1)\overline{(2\,0)})$	$2(3(2\,1))2$	$2(3(2\,1))(2\,0)$	$2(3(2\,1))\overline{(2\,0)}$	$2(3(2\,0)(2\,1))$
x	y	z	$z\rho$	x	x	z
$2(3(2\,0)(2\,0))1$	$2(3(2\,0)(2\,0))\overline{1}$	$2(3(2\,0)\overline{(2\,0)})\overline{1}$	$2(3(2\,0))3$	$2(3(2\,0))2\,1$	$2(3(2\,0))\overline{3}$	$2(3(2\,0))(3\,0)$
x	x	y	$z\rho$	$z\rho$	$z\rho$	x
$2(3(2\,0))\overline{(2\,1\,0)}$	$2(3(2\,0))(2\,1\,0)$	$2(3(2\,0))\overline{(3\,0)}$	$2(3(2\,0))(2\,1)$	$2(3(2\,0))(2\,0)1$	$2(3(2\,0))(2\,0)\overline{1}$	$2(3(2\,0))\overline{(2\,1)}$
x	x	x	x	z	z	x
$2(3(2\,0))\overline{(2\,0)1}$	$2(2\,1(2\,1))1\,1$	$2(2\,1(2\,0))1\,2$	$2(2\,1(2\,0))1\,1\,1$	$2(2\,1(2\,0))1(2\,0)$	$\overline{2(2\,1(2\,0))}2\,1$	$2(\overline{2\,1(2\,0)}(2\,1))$
z	$z\rho$	$z\rho$	$z\rho$	x	$z\rho$	z

Tangles 1964 – 2026 (with loops)

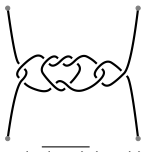
$2(\overline{2\,1(2\,0)}(2\,0))1$
x



$2(\overline{2\,1(2\,0)})2\,1$
$z\rho$

$2(3(\overline{2\,0})2\,1)$
x

$2(3(\overline{2\,0})2\,0)1$
z



$2(3(\overline{2\,0})(2\,1))$
z

$2(3(\overline{2\,0})(2\,0))1$
x

$2(3(\overline{2\,0})(2\,0))\overline{1}$
x

$2(3(\overline{2\,0}))3$
$z\rho$

$2(3(\overline{2\,0}))2\,1$
$z\rho$

$2(3(\overline{2\,0}))\overline{3}$
$z\rho$

$2(3(\overline{2\,0}))(3\,0)$
x

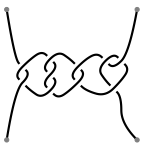
$2(3(\overline{2\,0}))(2\,1\,0)$
x

$2(3(\overline{2\,0}))\overline{(3\,0)}$
x

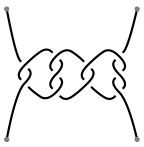
$2(3(\overline{2\,0}))(2\,1)$
x

$2(3(\overline{2\,0}))(2\,0)1$
z

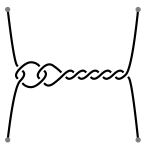
$2(3(\overline{2\,0}))(2\,0)\overline{1}$
z



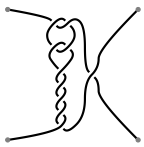
$2(3(2(2\,1\,0)))$
x



$2(3(2(\overline{3\,0})))$
x



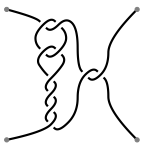
$2(2\,6)$
$z\rho$



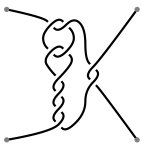
$2(2\,5)1$
$z\rho$

$2(2\,4(2\,0))$
$z\rho$

$2(2\,4(\overline{2\,0}))$
$z\rho$

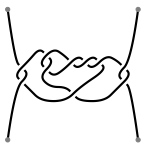


$2(2\,4)2$
$z\rho$



$2(2\,4)(2\,0)$
x

$2(2\,4)\overline{(2\,0)}$
x



$2(2\,3\,1(2\,0))$
$z\rho$

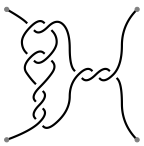
$2(2\,3\,1(\overline{2\,0}))$
$z\rho$

$2(2\,3(2\,1))$
$z\rho$

$2(2\,3(2\,0))1$
$z\rho$

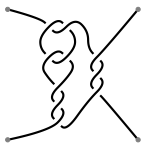
$2(2\,3(2\,0))\overline{1}$
$z\rho$

$2(2\,3(\overline{2\,0}))\overline{1}$
$z\rho$



$2(2\,3)3$
$z\rho$

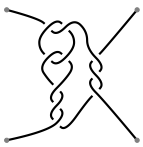
$2(2\,3)2\,1$
$z\rho$



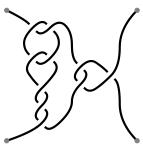
$2(2\,3)(3\,0)$
x

$2(2\,3)\overline{(2\,1\,0)}$
x

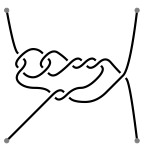
$2(2\,3)(2\,1\,0)$
x



$2(2\,3)\overline{(3\,0)}$
x



$2(2\,3)(2\,1)$
x



$2(2\,3)(2\,0)1$
z

$2(2\,3)(2\,0)\overline{1}$
z

$2(2\,3)\overline{(2\,0)1}$
z

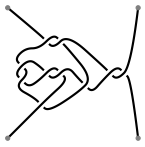
$2(2\,2\,1\,1\,0)1\,1$
y

$2(2\,2\,1\,3\,0)$
x

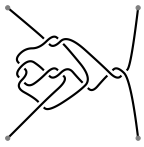
$2(2\,2\,1\,2\,1\,0)$
x

$2(2\,2\,1\,1\,2)$
x

$2(2\,2\,1\,1\,1)1$
z

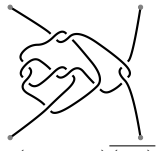


$2(2\,2\,1\,1\,0)2$
y

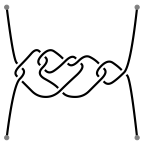


$2(2\,2\,1\,1\,0)\overline{2}$
y

$2(2\,2\,1\,1\,0)(2\,0)$
e



$2(2\,2\,1\,1\,0)\overline{(2\,0)}$
e



$2(2\,2\,1(2\,1))$
$z\rho$

$2(2\,2\,1(2\,0))1$
$z\rho$

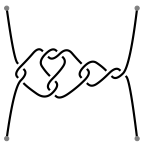
$2(2\,2\,1(2\,0))\overline{1}$
$z\rho$

$2(2\,2\,0)2(2\,0)$
x

$2(2\,2\,0)2\overline{(2\,0)}$
x

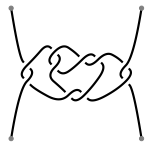
$2(2\,1\,1\,0)1\,1(2\,0)$
x

$2(2\,2\overline{(4\,0)})$
x

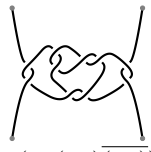


$2(2\,2(2\,2))$
$z\rho$

$2(2\,2(2\,1))1$
$z\rho$



$2(2\,2(2\,0)(2\,0))$
y



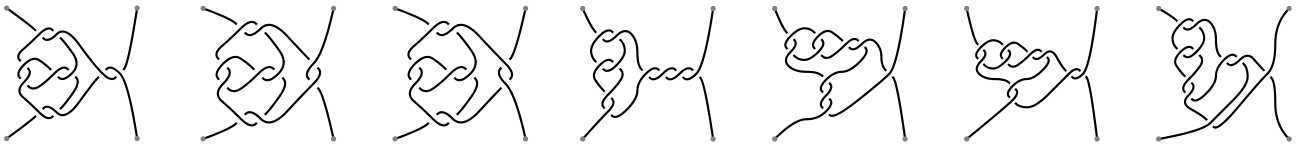
$2(2\,2(2\,0)\overline{(2\,0)})$
z

$2(2\,2(2\,0))2$
$z\rho$

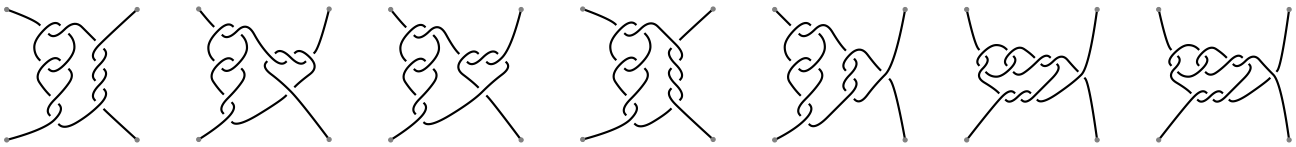
$2(2\,2(2\,0))\overline{2}$
$z\rho$

Tangles 2027 – 2089 (with loops)

$2(22(20))(20)$	$2(22(20))\overline{(20)}$	$2(211(20))11$	$2(22\overline{(20)}20)$	$2(22\overline{(20)}(20))$	$2(22\overline{(20)(20)})$	$2(22\overline{(20)})2$
x	x	$z\rho$	x	y	z	$z\rho$



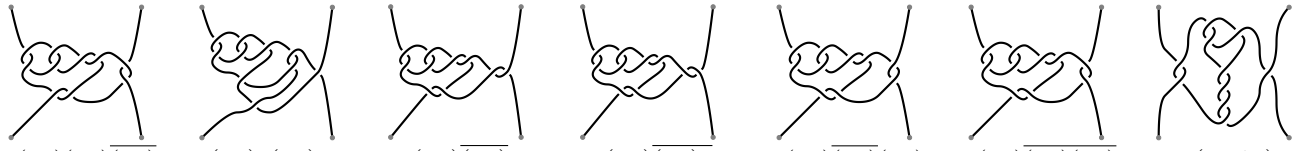
$2(22\overline{(20)})\overline{2}$	$2(22\overline{(20)})(20)$	$2(22\overline{(20)})\overline{(20)}$	$2(22)4$	$2(22)31$	$2(22)22$	$2(22)211$
$z\rho$	x	x	$z\rho$	$z\rho$	$z\rho$	$z\rho$



$2(22)(40)$	$2(22)\overline{(310)}$	$2(22)(310)$	$2(22)\overline{(40)}$	$2(22)(31)$	$2(22)(30)1$	$2(22)(30)\overline{1}$
x	x	x	x	x	z	z

$2(22)\overline{(210)1}$	$2(22)(220)$	$2(22)\overline{(2110)}$	$2(22)(22)$	$2(22)(2110)$	$2(22)\overline{(220)}$	$2(22)(211)$
z	x	x	x	x	x	x

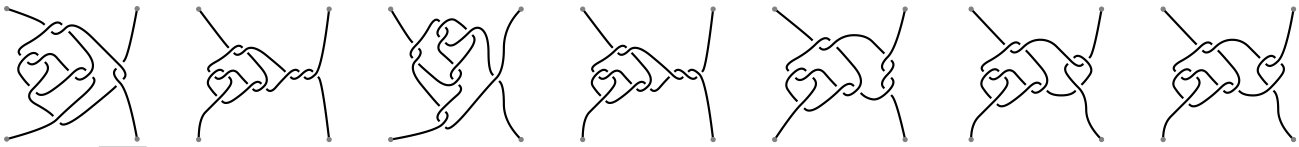
$2(22)(210)1$	$2(22)\overline{(30)}1$	$2(22)\overline{(30)}1$	$2(22)(21)1$	$2(22)(20)2$	$2(22)(20)\overline{2}$	$2(22)(20)(20)$
z	z	z	z	y	y	e



$2(22)(20)\overline{(20)}$	$2(21)1(20)11$	$2(22)\overline{(20)}2$	$2(22)\overline{(20)2}$	$2(22)\overline{(20)}(20)$	$2(22)\overline{(20)(20)}$	$2(2141)$
e	y	y	y	e	e	x

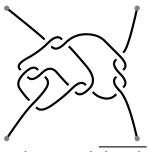
$2(2140)1$	$2(2140)\overline{1}$	$2(2311)$	$2(2310)1$	$2(213(20))$	$2(213\overline{(20)})$	$2(2123)$
z	z	x	z	$z\rho$	$z\rho$	x

$2(2122)1$	$2(212120)$	$2(2121110)$	$2(2121(20))$	$2(2121\overline{(20)})$	$2(2121)2$	$2(2121)(20)$
z	x	x	$z\rho$	$z\rho$	y	e

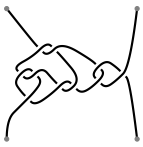


$2(2121)\overline{(20)}$	$2(2120)3$	$2(2120)21$	$2(2120)\overline{3}$	$2(2120)(30)$	$2(2120)\overline{(210)}$	$2(2120)(210)$
e	z	x	z	e	e	e

Tangles 2090 – 2152 (with loops)



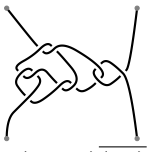
$2(2\,1\,2\,0)\overline{(3\,0)}$
e



$2(2\,1\,2\,0)(2\,1)$
e

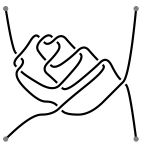
$2(2\,1\,2\,0)(2\,0)1$
e

$2(2\,1\,2\,0)(2\,0)\overline{1}$
e



$2(2\,1\,2\,0)\overline{(2\,1)}$
e

$2(2\,1\,2\,0)\overline{(2\,0)1}$
e



$2(2\,1\,1\,1\,1)1\,1$
y

$2(2\,1\,1\,1\,0)1\,2$
z

$2(2\,1\,1\,1\,0)1\,1\,1$
x

$2(2\,1\,1\,1\,0)1(2\,0)$
e

$2(2\,1\,2(2\,1\,0))$
x

$2(2\,1\,2\,\overline{(3\,0)})$
x

$2(2\,1\,1\,3\,1)$
x

$2(2\,1\,1\,3\,0)1$
z

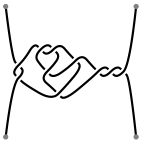
$2(2\,1\,1\,3\,0)\overline{1}$
z

$2(2\,1\,1\,2\,1\,1)$
x

$2(2\,1\,1\,2\,1\,0)1$
z

$2(2\,1\,1\,2(2\,0))$
$z\rho$

$2(2\,1\,1\,2\,\overline{(2\,0)})$
$z\rho$



$2(2\,1\,1\,1\,3)$
x

$2(2\,1\,1\,1\,2)1$
z

$2(2\,1\,1\,1\,1\,2\,0)$
x

$2(2\,1\,1\,1\,1\,1\,1\,0)$
x

$2(2\,1\,1\,1\,1(2\,0))$
$z\rho$

$2(2\,1\,1\,1\,1\,\overline{(2\,0)})$
$z\rho$

$2(2\,1\,1\,1\,1)2$
y

$2(2\,1\,1\,1\,1)(2\,0)$
e

$2(2\,1\,1\,1\,1)\overline{(2\,0)}$
e

$2(2\,1\,1\,1\,0)3$
z

$2(2\,1\,1\,1\,0)2\,1$
x

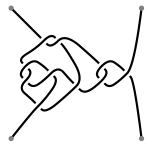
$2(2\,1\,1\,1\,0)\overline{3}$
z

$2(2\,1\,1\,1\,0)(3\,0)$
e

$2(2\,1\,1\,1\,0)\overline{(2\,1\,0)}$
e

$2(2\,1\,1\,1\,0)(2\,1\,0)$
e

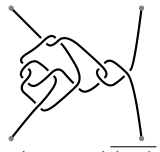
$2(2\,1\,1\,1\,0)\overline{(3\,0)}$
e



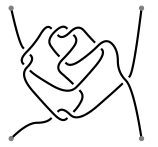
$2(2\,1\,1\,1\,0)(2\,1)$
e

$2(2\,1\,1\,1\,0)(2\,0)1$
e

$2(2\,1\,1\,1\,0)(2\,0)\overline{1}$
e



$2(2\,1\,1\,1\,0)\overline{(2\,1)}$
e



$2(2\,1\,1\,1\,0)\overline{(2\,0)1}$
e

$2(2\,1\,2\,1)1\,1$
y

$2(2\,1\,2\,0)1\,2$
z

$2(2\,1\,2\,0)1\,1\,1$
x

$2(2\,1\,2\,0)1(2\,0)$
e

$2\overline{(2\,1\,2\,0)}2\,1$
x

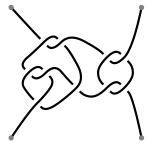
$\overline{2}(2\,1\,2\,0)\overline{1\,1\,1}$
x

$2(2\,1\,1\,1(2\,1\,0))$
x

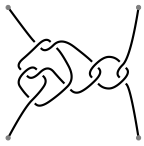
$2(2\,1\,1\,1\,\overline{(3\,0)})$
x

$2(2\,1\,1\,0)2(2\,0)$
x

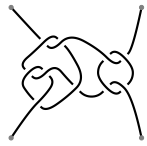
$2(2\,1\,1\,0)2\overline{(2\,0)}$
x



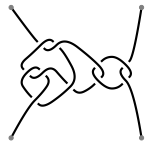
$2(2\,1\,1\,0)(2(2\,0)0)$
e



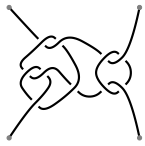
$2(2\,1\,1\,0)(2(2\,0))$
e



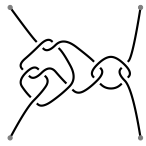
$2(2\,1\,1\,0)\overline{(2(2\,0)0)}$
e



$2(2\,1\,1\,0)\overline{(2(2\,0))}$
e



$2(2\,1\,1\,0)(2\overline{(2\,0)}0)$
y



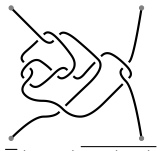
$2(2\,1\,1\,0)(2\overline{(2\,0)})$
e

$2(2\,2\,0)1\,1(2\,0)$
x

$\overline{2(2\,2\,0)}2(2\,0)$
x

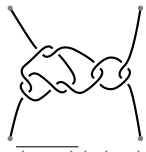
$\overline{2(2\,2\,0)}2\overline{(2\,0)}$
x

$2\overline{(2\,2\,0)}2(2\,0)$
x



$\overline{2}(2\,2\,0)\overline{1\,1(2\,0)}$
x

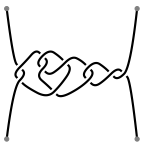
$2\overline{(2\,2\,0)}2\overline{(2\,0)}$
x



$2\overline{(2\,2\,0)}(2(2\,0))$
e

Tangles 2153 – 2215 (with loops)

$2(2\,1\,1\overline{(4\,0)})$
x



$2(2\,1\,1(2\,2))$
$z\rho$

$2(2\,1\,1(2\,1))1$
$z\rho$

$\overline{2}(2(2\,1\,1\,0)\overline{(2\,0)})$
y

$2(2\,1\,1(2\,0))2$
$z\rho$

$2(2\,1\,1(2\,0))\overline{2}$
$z\rho$

$2(2\,1\,1(2\,0))(2\,0)$
x

$2(2\,1\,1(2\,0))\overline{(2\,0)}$
x

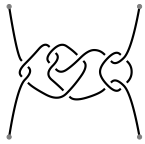
$2(2\,2(2\,0))1\,1$
$z\rho$

$2(2\,1\,1\overline{(2\,0)})2$
$z\rho$

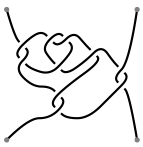
$2(2\,1\,1\overline{(2\,0)})\overline{2}$
$z\rho$

$2(2\,1\,1\overline{(2\,0)})(2\,0)$
x

$2(2\,1\,1\overline{(2\,0)})\overline{(2\,0)}$
x



$2(2\,1\,1(2\overline{(2\,0)}0))$
x



$2(2\,1\,1)2(2\,0)$
x

$2(2\,1\,1)2\overline{(2\,0)}$
x

$2(2\,1\,1)(2(2\,0)0)$
e

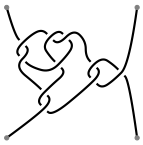
$2(2\,1\,1)(2(2\,0))$
e

$2(2\,1\,1)\overline{(2(2\,0)0)}$
e

$2(2\,1\,1)\overline{(2(2\,0))}$
e

$2(2\,1\,1)(2\overline{(2\,0)}0)$
y

$2(2\,1\,1)(2\overline{(2\,0)})$
e



$2(2\,1\,0)2(2\,1)$
x

$2(2\,1\,0)2(2\,0)1$
z

$2(2\,1\,0)2(2\,0)\overline{1}$
z

$2(2\,1\,0)2\overline{(2\,0)1}$
z

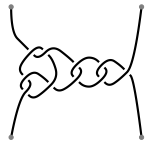
$2(2\,1\,0)\overline{(2\,1\,0)}(2\,0)$
e

$2(2\,1\,0)\overline{(2\,1\,0)(2\,0)}$
e

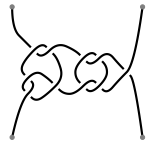
$2(2\,1\,0)(2\,1\,0)(2\,0)$
e

$2(2\,1\,0)(2\,1\,0)\overline{(2\,0)}$
e

$2(2\,1\,0)\overline{(2(2\,0)1\,0)}$
e



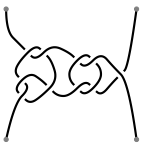
$2(2\,1\,0)(2(2\,1))$
e



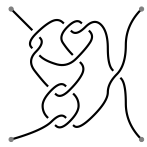
$2(2\,1\,0)(2(2\,0)1)$
e

$2(2\,1\,0)(2(2\,0)0)1$
e

$2(2\,1\,0)(2(2\,0)0)\overline{1}$
e



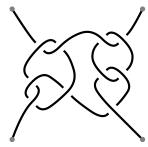
$2(2\,1\,0)(2(2\,0)\overline{1})$
e



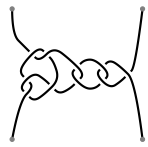
$2(2\,1\,0)(2(2\,0))1$
e

$2(2\,1\,0)(2(2\,0))\overline{1}$
e

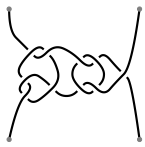
$2(2\,1\,0)(2(2\,0)1\,0)$
e



$2(2\,1\,0)\overline{(2(2\,1)0)}$
e

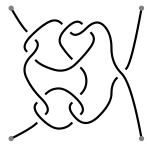


$2(2\,1\,0)\overline{(2(2\,1))}$
e



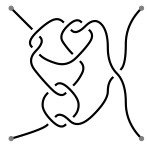
$2(2\,1\,0)(\overline{(2\,2\,0)}1)$
e

$2(2\,1\,0)\overline{(2(2\,0)0)}1$
e

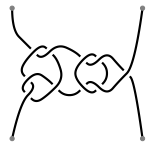


$2(2\,1\,0)\overline{(2(2\,0)0)}\overline{1}$
e

$2(2\,1\,0)\overline{(2(2\,0)1)}$
e



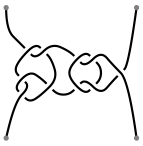
$2(2\,1\,0)\overline{(2(2\,0))}\overline{1}$
e



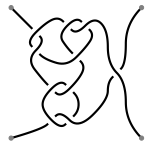
$2(2\,1\,0)(2\overline{(2\,0)}1)$
z

$2(2\,1\,0)(2\overline{(2\,0)}0)1$
x

$2(2\,1\,0)(2\overline{(2\,0)}0)\overline{1}$
x

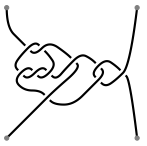


$2(2\,1\,0)(2\overline{(2\,0)1})$
z



$2(2\,1\,0)(2\overline{(2\,0)})\overline{1}$
e

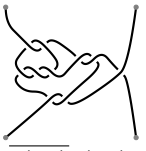
$2(3\,1)1\,1(2\,0)$
x



$2(3\,0)1\,1(2\,1)$
x

$2(3\,0)1\,1(2\,0)1$
z

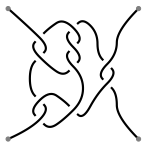
$\overline{2(3\,0)}2(2\,1)$
x



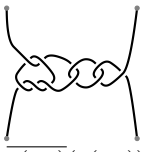
$\overline{2(3\,0)}2(2\,0)1$
z

$\overline{2(3\,0)}2(2\,0)\overline{1}$
z

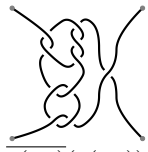
$\overline{2(3\,0)}2\overline{(2\,0)1}$
z



$\overline{2(3\,0)}(2\,1\,0)(2\,0)$
e



$\overline{2(3\,0)}(2(2\,1))$
e



$\overline{2(3\,0)}(2(2\,0))1$
e

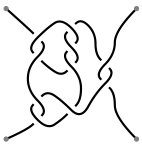
$\overline{2(3\,0)}2(2\,1)$
x

$\overline{2(3\,0)}2(2\,0)1$
z

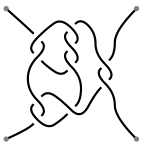
Tangles 2216 – 2278 (with loops)

$2(\overline{3\,0})2(2\,0)\overline{1}$
z

$2(\overline{3\,0})2(\overline{2\,0})\overline{1}$
z



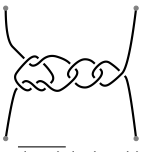
$2(\overline{3\,0})(2\,1\,0)(2\,0)$
e



$2(\overline{3\,0})(2\,1\,0)(\overline{2\,0})$
e

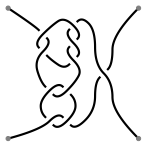
$2(\overline{3\,0})(2\,1\,0)(2\,0)$
e

$2(\overline{3\,0})(2\,1\,0)(\overline{2\,0})$
e

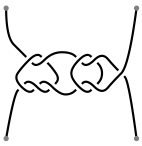


$2(\overline{3\,0})(2(2\,1))$
e

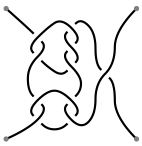
$2(\overline{3\,0})(2(2\,0))1$
e



$2(\overline{3\,0})(2(2\,0))\overline{1}$
e

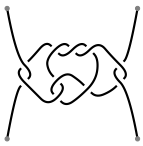


$2(\overline{3\,0})(2(\overline{2\,0})1)$
z

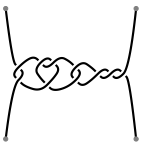


$2(\overline{3\,0})(2(\overline{2\,0})0)1$
x

$2(2\,1(\overline{4\,0}))1$
z



$\overline{2}(3(2\,1\,0)(\overline{2\,0}))$
y

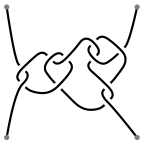


$2(2\,1(2\,3))$
$z\rho$

$2(2\,1(2\,2))1$
$z\rho$

$2(2\,1(2\,1\,2\,0))$
x

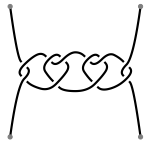
$2(2\,1(2\,1\,1\,1\,0))$
x



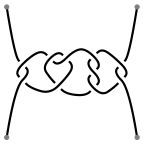
$2(2\,1(\overline{2\,1\,2\,0}))$
x

$2(2\,1(\overline{3\,0})(2\,0))$
$z\rho$

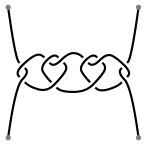
$2(2\,1(\overline{3\,0})(\overline{2\,0}))$
$z\rho$



$2(2\,1(2\,1(2\,0)))$
$z\rho$



$2(2\,1(\overline{3(2\,0)}))$
$z\rho$



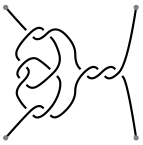
$2(2\,1(2\,1(\overline{2\,0})))$
$z\rho$

$\overline{2}(2(2\,1\,1)(\overline{2\,0}))$
y

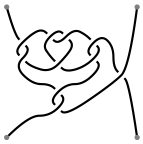
$2(2\,1(2\,1))2$
$z\rho$

$2(2\,1(2\,1))(2\,0)$
x

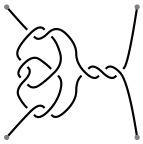
$2(2\,1(2\,1))(\overline{2\,0})$
x



$2(2\,1(2\,0))3$
$z\rho$



$2(2\,1(2\,0))2\,1$
$z\rho$



$2(2\,1(2\,0))\overline{3}$
$z\rho$

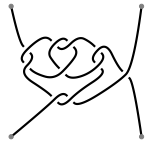
$2(2\,1(2\,0))(3\,0)$
x

$2(2\,1(2\,0))(\overline{2\,1\,0})$
x

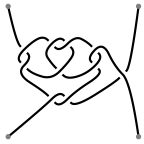
$2(2\,1(2\,0))(2\,1\,0)$
x

$2(2\,1(2\,0))(\overline{3\,0})$
x

$2(2\,1(2\,0))(2\,1)$
x

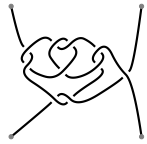


$2(2\,1(2\,0))(2\,0)1$
z

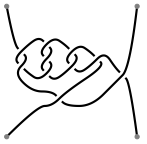


$2(2\,1(2\,0))(2\,0)\overline{1}$
z

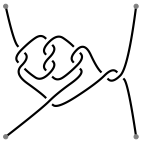
$2(2\,1(2\,0))(\overline{2\,1})$
x



$2(2\,1(2\,0))(\overline{2\,0})1$
z



$2(3(2\,1))1\,1$
$z\rho$



$2(3(2\,0))1\,2$
$z\rho$

$2(3(2\,0))1\,1\,1$
$z\rho$

$2(3(2\,0))1(2\,0)$
x

$2(3(2\,0)1(2\,0))$
z

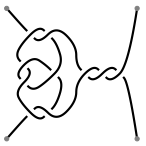
$\overline{2(3(2\,0))}2\,1$
$z\rho$

$2\overline{(3(2\,0))}2\,1$
$z\rho$

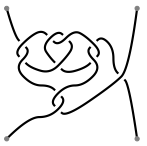
$2\overline{(3(2\,0))}(2\,1\,0)$
x

$2\overline{(3(2\,0))}(2\,1)$
x

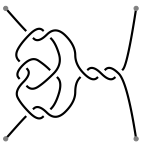
$2\overline{(3(2\,0))}(2\,0)1$
z



$2(2\,1(\overline{2\,0}))3$
$z\rho$



$2(2\,1(\overline{2\,0}))2\,1$
$z\rho$



$2(2\,1(\overline{2\,0}))\overline{3}$
$z\rho$

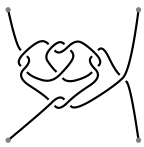
$2(2\,1(\overline{2\,0}))(3\,0)$
x

$2(2\,1(\overline{2\,0}))(\overline{2\,1\,0})$
x

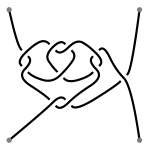
$2(2\,1(\overline{2\,0}))(2\,1\,0)$
x

$2(2\,1(\overline{2\,0}))(\overline{3\,0})$
x

$2(2\,1(\overline{2\,0}))(2\,1)$
x

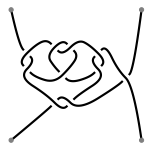


$2(2\,1(\overline{2\,0}))(2\,0)1$
z

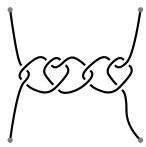


$2(2\,1(\overline{2\,0}))(2\,0)\overline{1}$
z

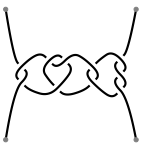
$2(2\,1(\overline{2\,0}))(\overline{2\,1})$
x



$2(2\,1(\overline{2\,0}))(\overline{2\,0})1$
z

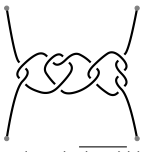


$2(2\,1(2(2\,1\,0)))$
x

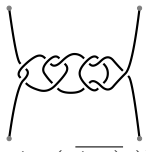


$2(2\,1(\overline{2(3\,0)}))$
x

Tangles 2279 – 2341 (with loops)



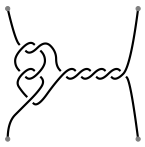
$2(2\,1(2\overline{(3\,0)}))$
x



$2(2\,1(2\overline{(2\,0)}1))$
x

$2(2\,1(2\overline{(2\,0)}0))1$
z

$2(\overline{3}(\overline{2}(2\,0)0))1$
z



$2(2\,1)5$
$z\rho$

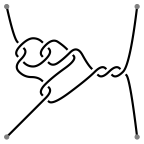
$2(2\,1)4\,1$
$z\rho$

$2(2\,1)3\,2$
$z\rho$

$2(2\,1)3\,1\,1$
$z\rho$

$2(2\,1)3(2\,0)$
x

$2(2\,1)3\overline{(2\,0)}$
x



$2(2\,1)2\,3$
$z\rho$

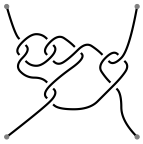
$2(2\,1)2\,2\,1$
$z\rho$

$2(2\,1)2\,1\,2$
$z\rho$

$2(2\,1)2\,1\,1\,1$
$z\rho$

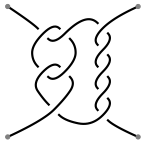
$2(2\,1)2\,1(2\,0)$
x

$2(2\,1)2(3\,0)$
x



$2(2\,1)2(2\,1\,0)$
x

$2(2\,1)2\overline{(3\,0)}$
x



$2(2\,1)(5\,0)$
x

$2(2\,1)\overline{(4\,1\,0)}$
x

$2(2\,1)(4\,1\,0)$
x

$2(2\,1)\overline{(5\,0)}$
x

$2(2\,1)(4\,1)$
x

$2(2\,1)(4\,0)1$
z

$2(2\,1)(4\,0)\overline{1}$
z

$2(2\,1)\overline{(3\,1\,0)1}$
z

$2(2\,1)(3\,2\,0)$
x

$2(2\,1)\overline{(3\,1\,1\,0)}$
x

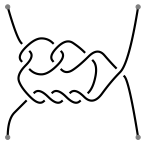
$2(2\,1)(3\,2)$
x

$2(2\,1)(3\,1\,1\,0)$
x

$2(2\,1)\overline{(3\,2\,0)}$
x

$2(2\,1)(3\,1\,1)$
x

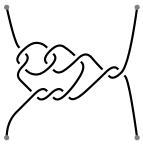
$2(2\,1)(3\,1\,0)1$
z



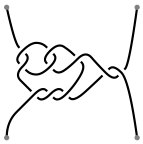
$2(2\,1)\overline{(4\,0)}1$
z

$2(2\,1)\overline{(4\,0)1}$
z

$2(2\,1)(3\,1)1$
z



$2(2\,1)(3\,0)2$
y



$2(2\,1)(3\,0)\overline{2}$
y

$2(2\,1)(3\,0)(2\,0)$
e

$2(2\,1)(3\,0)\overline{(2\,0)}$
e

$2(2\,0)1(2\,1\,0)1\,1$
y

$2(2\,1)\overline{(2\,1\,0)}2$
y

$2(2\,1)\overline{(2\,1\,0)2}$
y

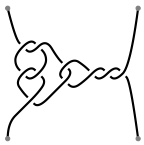
$2(2\,1)(3(2\,0))$
x

$2(2\,1)\overline{(2\,1(2\,0))}$
x

$2(2\,1)(3\overline{(2\,0)})$
x

$2(2\,1)(2\,3\,0)$
x

$2(2\,1)\overline{(2\,2\,1\,0)}$
x



$2(2\,1)(2\,3)$
x

$2(2\,1)(2\,2\,1\,0)$
x

$2(2\,1)\overline{(2\,3\,0)}$
x

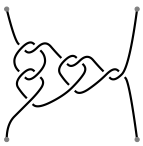
$2(2\,1)(2\,2\,1)$
x

$2(2\,1)(2\,2\,0)1$
z

$2(2\,1)(2\,2\,0)\overline{1}$
z

$2(2\,1)(2\,2)1$
z

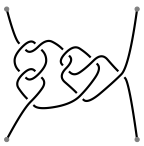
$2(2\,1)(2\,1\,2\,0)$
x



$2(2\,1)(2\,1\,2)$
x

$2(2\,1)(2\,1\,1\,1\,0)$
x

$2(2\,1)\overline{(2\,1\,2\,0)}$
x



$2(2\,1)(2\,1\,1\,1)$
x

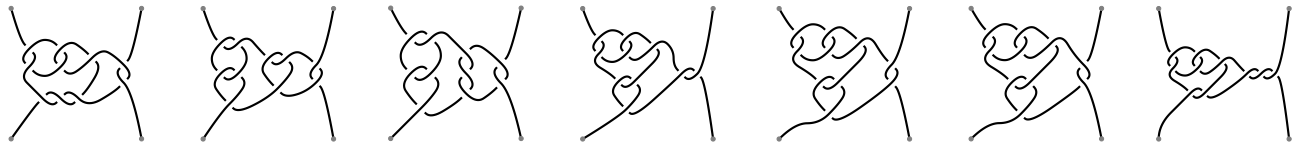
$2(2\,1)(2\,1\,1\,0)1$
z

$2(2\,1)\overline{(2\,2\,0)}1$
z

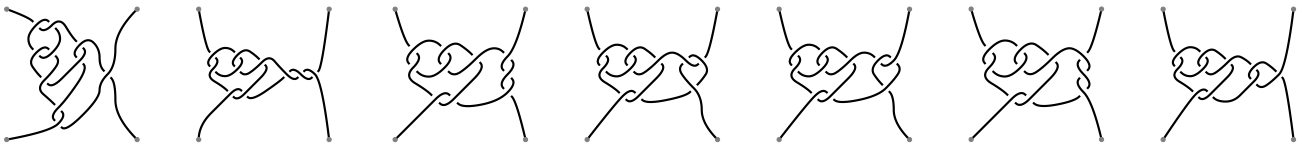
$2(2\,1)\overline{(2\,2\,0)1}$
z

Tangles 2342 – 2404 (with loops)

$2(21)(211)1$	$2(21)(210)2$	$2(21)(210)\overline{2}$	$2(20)1(30)11$	$2(21)\overline{(30)}2$	$2(21)\overline{(30)2}$	$2(21)\overline{(30)}(20)$
z	y	y	y	y	y	e

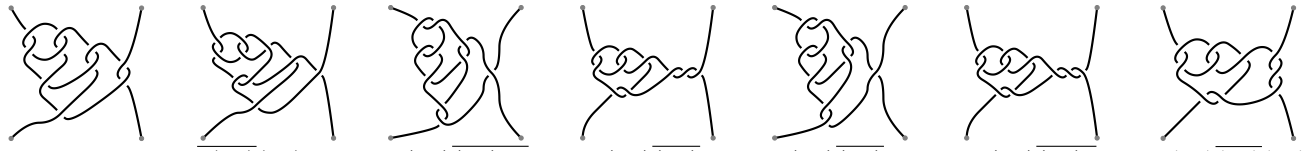


$2(21)\overline{(30)(20)}$	$2(21)(21(20))$	$2(21)\overline{(3(20))}$	$2(21)(21)2$	$2(21)(21)(20)$	$2(21)(21)\overline{(20)}$	$2(21)(20)3$
e	x	x	y	e	e	z

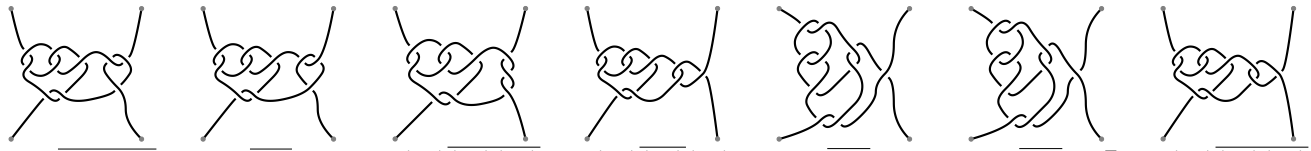


$2(21)(20)21$	$2(21)(20)\overline{3}$	$2(21)(20)(30)$	$2(21)(20)\overline{(210)}$	$2(21)(20)(210)$	$2(21)(20)\overline{(30)}$	$2(21)(20)(21)$
x	z	e	e	e	e	e

$2(21)(20)(20)1$	$2(21)(20)(20)\overline{1}$	$2(21)(20)\overline{(21)}$	$2(21)(20)\overline{(20)1}$	$2(20)1(21)11$	$2(20)1(20)12$	$2(20)1(20)111$
e	e	e	e	y	z	x

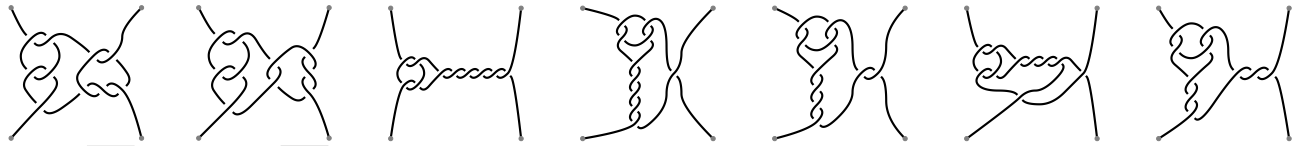


$2(20)1(20)1(20)$	$\overline{2(21)}(20)111$	$2(21)\overline{(20)}21$	$2(21)\overline{(20)}3$	$2(21)\overline{(20)}21$	$2(21)\overline{(20)}3$	$2(21)\overline{(20)}(30)$
e	x	x	z	x	z	e



$2(21)\overline{(20)(210)}$	$2(21)\overline{(20)}(210)$	$2(21)\overline{(20)(30)}$	$2(21)\overline{(20)}(21)$	$2(21)\overline{(20)}(20)1$	$2(21)\overline{(20)}(20)\overline{1}$	$2(21)\overline{(20)(21)}$
e	e	e	e	e	e	e

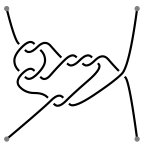
$2(21)\overline{(20)(20)1}$	$2(21)(2(30))$	$2(21)\overline{(2(210))}$	$2(21)(2(210)0)$	$2(21)(2(210))$	$2(21)\overline{(2(30)0)}$	$2(21)\overline{(2(30))}$
e	x	x	e	x	e	x



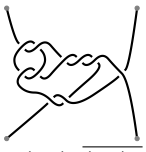
$2(21)(2\overline{(30)}0)$	$2(21)(2\overline{(30)})$	$2(20)6$	$2(20)51$	$2(20)42$	$2(20)411$	$2(20)33$
e	x	$z\rho$	$z\rho$	$z\rho$	$z\rho$	$z\rho$

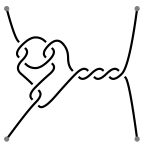
$2(20)321$	$2(20)312$	$2(20)3111$	$2(20)3(30)$	$2(20)3(210)$	$2(20)3\overline{(30)}$	$2(20)3(21)$
$z\rho$	$z\rho$	$z\rho$	x	x	x	x

Tangles 2405 – 2467 (with loops)

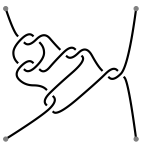

2(20)3(20)1
z

2(20)3(20)$\overline{1}$
z


2(20)3$\overline{(20)1}$
z


2(20)24
$z\rho$

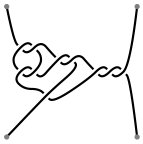
2(20)231
$z\rho$


2(20)222
$z\rho$

2(20)2211
$z\rho$

2(20)22(20)
x

2(20)22$\overline{(20)}$
x


2(20)213
$z\rho$

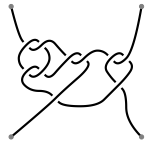
2(20)2121
$z\rho$

2(20)2112
$z\rho$

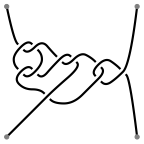
2(20)21111
$z\rho$

2(20)211(20)
x

2(20)21(30)
x


2(20)21(210)
x

2(20)21$\overline{(30)}$
x


2(20)21(21)
x

2(20)21(20)1
z

2(20)2(31)
x

2(20)2(30)1
z

2(20)2(30)$\overline{1}$
z

2(20)2(220)
x

2(20)2(210)
x

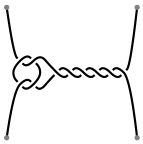
2(20)2$\overline{(220)}$
x

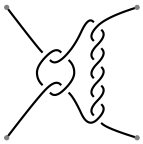
2(20)2(21)
x

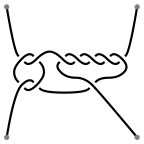
2(20)2(210)1
z

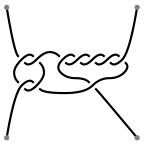
2(20)2$\overline{(30)}$1
z

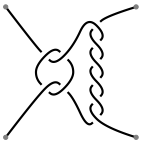
2(20)2$\overline{(30)1}$
z


2(20)$\overline{6}$
$z\rho$


2(20)(60)
x


2(20)$\overline{(510)}$
x

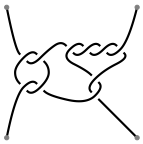

2(20)(510)
x

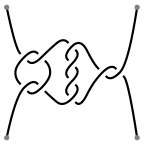

2(20)$\overline{(60)}$
x

2(20)(51)
x

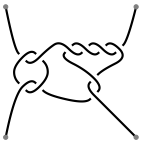
2(20)(50)1
z

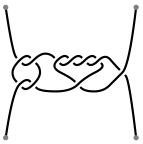
2(20)(50)$\overline{1}$
z


2(20)(420)
x

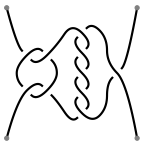

2(20)(42)
x

2(20)(410)
x


2(20)$\overline{(420)}$
x


2(20)(411)
x

2(20)(410)1
z


2(20)$\overline{(51)}$
x

2(20)$\overline{(50)}$1
z

2(20)$\overline{(50)1}$
z

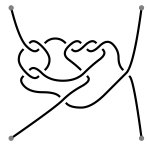
2(20)(41)1
z

2(20)(40)2
y

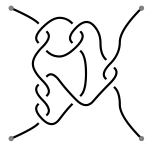
2(20)(40)$\overline{2}$
y

2(20)(40)(20)
e

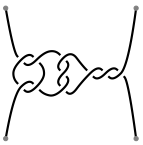
2(20)(40)$\overline{(20)}$
e


$\overline{2(20)}$(310)11
y

2(20)$\overline{(310)}$2
y


2(20)$\overline{(310)}$(20)
e

2(20)(330)
x


2(20)(33)
x

2(20)(3210)
x

2(20)$\overline{(330)}$
x

2(20)(321)
x

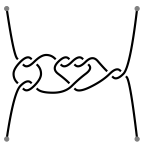
2(20)(320)1
z

2(20)(320)$\overline{1}$
z

2(20)(32)1
z

2(20)(3120)
x

Tangles 2468 – 2530 (with loops)


$2(20)(312)$
x

$2(20)(31110)$
x

$2(20)(3111)$
x

$2(20)(31110)1$
z

$2(20)\overline{(320)}1$
z

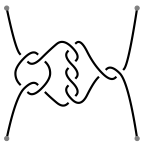
$2(20)(311)1$
z

$2(20)(310)2$
y

$2(20)(310)\overline{2}$
y

$2(20)(310)(20)$
e

$2(20)(310)\overline{(20)}$
e


$2(20)\overline{(42)}$
x

$\overline{2(20)}(40)11$
y

$2(20)\overline{(40)}2$
y

$2(20)\overline{(40)2}$
y

$2(20)\overline{(40)}(20)$
e

$2(20)\overline{(40)(20)}$
e

$2(20)(31)2$
y

$2(20)(30)3$
z

$2(20)(30)21$
x

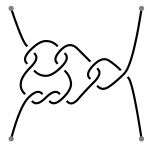
$2(20)(30)\overline{3}$
z

$2(20)(30)(30)$
e

$2(20)(30)\overline{(210)}$
e

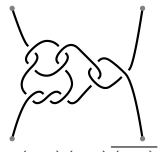
$2(20)(30)(210)$
e

$2(20)(30)\overline{(30)}$
e

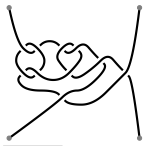

$2(20)(30)(21)$
e

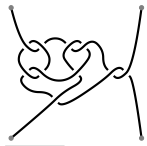
$2(20)(30)(20)1$
e

$2(20)(30)(20)\overline{1}$
e


$2(20)(30)\overline{(21)}$
e

$2(20)(30)\overline{(20)1}$
e


$\overline{2(20)}(211)11$
y


$\overline{2(20)}(210)12$
z

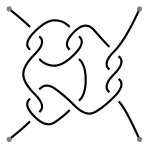
$\overline{2(20)}(210)111$
x

$\overline{2(20)}(210)1(20)$
e

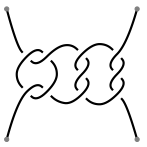
$2(20)\overline{(211)}(20)$
e

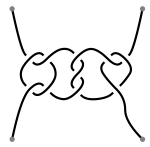
$2(20)\overline{(210)}3$
z

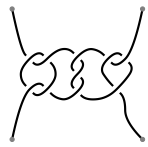
$2(20)\overline{(210)}21$
x


$2(20)\overline{(210)}(30)$
e

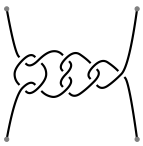
$2(20)\overline{(210)}(210)$
e


$2(20)(3(30))$
x


$2(20)(3\overline{(210)})$
x


$2(20)(3(210))$
x

$2(20)(3\overline{(30)})$
x

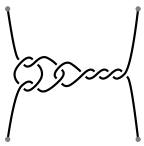

$2(20)(3(21))$
x

$2(20)(3(20))1$
z

$2(20)(3(20))\overline{1}$
z

$2(20)(3\overline{(20)})\overline{1}$
z

$2(20)(240)$
x


$2(20)(24)$
x

$2(20)(2310)$
x

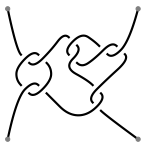
$2(20)\overline{(240)}$
x

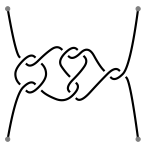
$2(20)(231)$
x

$2(20)(230)1$
z

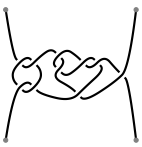
$2(20)(230)\overline{1}$
z

$2(20)(23)1$
z


$2(20)(2220)$
x


$2(20)(222)$
x

$2(20)(22110)$
x


$2(20)(2211)$
x

$2(20)(2210)1$
z

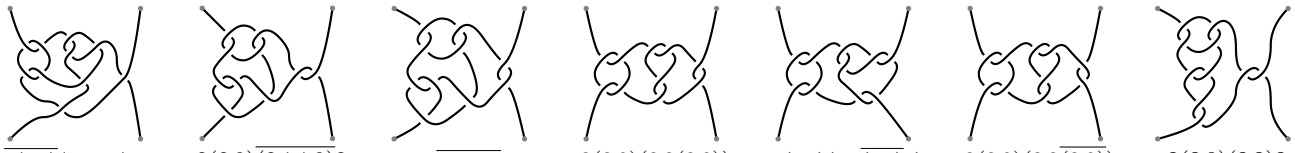
$2(20)\overline{(230)}1$
z

$2(20)(221)1$
z

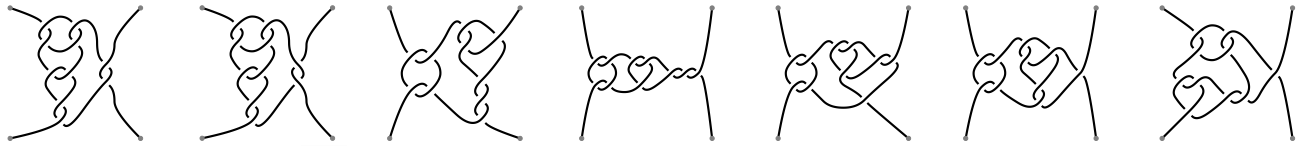
$2(20)(220)2$
y

$2(20)(220)\overline{2}$
y

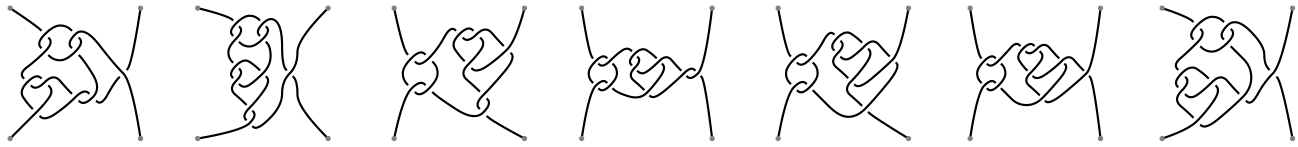
Tangles 2531 – 2593 (with loops)



$\overline{2(20)}(2110)11$ y | $2(20)\overline{(2110)}2$ y | $2(20)\overline{(2110)}(20)$ e | $2(20)(22(20))$ x | $2(20)(22\overline{(20)}0)$ e | $2(20)(22\overline{(20)})$ x | $2(20)(22)2$ y



$2(20)(22)(20)$ e | $2(20)(22)\overline{(20)}$ e | $2(20)(2130)$ x | $2(20)(213)$ x | $2(20)(21210)$ x | $2(20)(2121)$ x | $2(20)(21201)$ z



$2(20)(21201)\overline{1}$ z | $2(20)(212)1$ z | $2(20)(21120)$ x | $2(20)(2112)$ x | $2(20)(211110)$ x | $2(20)(21111)$ x | $2(20)(211101)$ z

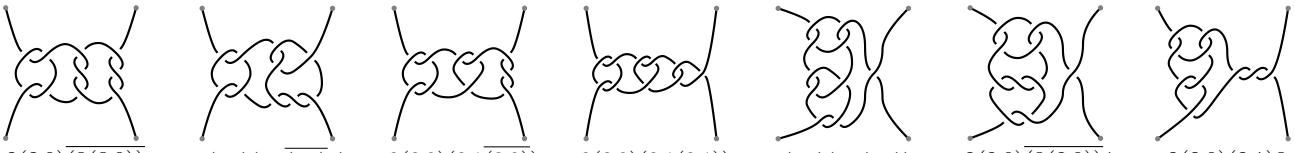
$2(20)\overline{(2120)}1$ z | $2(20)(2111)1$ z | $2(20)(2110)2$ y | $2(20)(2110)\overline{2}$ y | $2(20)(2110)(20)$ e | $2(20)(2110)\overline{(20)}$ e | $\overline{2(20)}(220)11$ y

$2(20)\overline{(220)}2$ y | $2(20)(211(20))$ x | $2(20)(211)2$ y | $2(20)(211)(20)$ e | $2(20)(211)\overline{(20)}$ e | $2(20)(210)3$ z | $2(20)(210)21$ x

$2(20)(210)\overline{3}$ z | $2(20)(210)(30)$ e | $2(20)(210)\overline{(210)}$ e | $2(20)(210)(210)$ e | $2(20)(210)\overline{(30)}$ e | $2(20)\overline{(33)}$ x | $\overline{2(20)}(31)11$ y

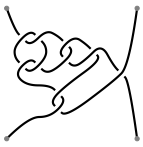
$\overline{2(20)}(30)12$ z | $\overline{2(20)}(30)111$ x | $2(20)\overline{(30)}3$ z | $2(20)\overline{(30)}21$ x | $2(20)\overline{(30)3}$ z | $2(20)\overline{(30)}(30)$ e | $2(20)\overline{(30)}(210)$ e

$2(20)\overline{(30)(30)}$ e | $2(20)\overline{(30)}(21)$ e | $2(20)\overline{(30)}(20)1$ e | $2(20)\overline{(30)}(20)\overline{1}$ e | $2(20)(21(30))$ x | $2(20)(21(210)0)$ x | $2(20)(21(210))$ x



$2(20)\overline{(3(30))}$ x | $2(20)(21\overline{(30)}0)$ x | $2(20)(21\overline{(30)})$ x | $2(20)(21(21))$ x | $2(20)(21(20))1$ z | $2(20)\overline{(3(20))}1$ z | $2(20)(21)3$ z

Tangles 2594 – 2656 (with loops)


$2(20)(21)21$
x

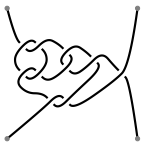
$2(20)(21)(30)$
e

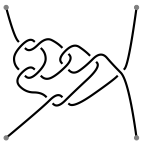
$2(20)(21)\overline{(210)}$
e

$2(20)(21)(210)$
e

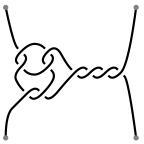
$2(20)(21)\overline{(30)}$
e

$2(20)(21)(21)$
e


$2(20)(21)(20)1$
e


$2(20)(21)(20)\overline{1}$
e

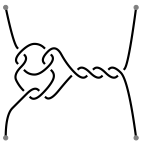
$2(20)(21)\overline{(20)1}$
e

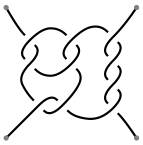

$2(20)(20)4$
y

$2(20)(20)31$
y

$2(20)(20)22$
x

$2(20)(20)211$
z

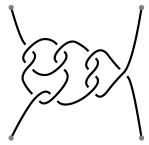

$2(20)(20)\overline{4}$
y


$2(20)(20)(40)$
e

$2(20)(20)\overline{(310)}$
e

$2(20)(20)(310)$
e

$2(20)(20)\overline{(40)}$
e

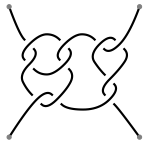

$2(20)(20)(31)$
e

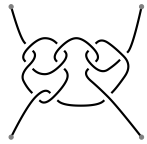
$2(20)(20)(30)1$
e

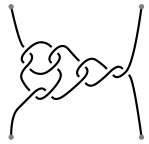
$2(20)(20)(30)\overline{1}$
e

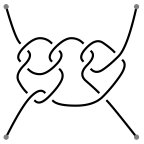
$2(20)(20)\overline{(211)}$
e

$2(20)(20)\overline{(210)1}$
e


$2(20)(20)(220)$
e


$2(20)(20)\overline{(210)}$
e


$2(20)(20)(22)$
e


$2(20)(20)(210)$
e

$2(20)(20)\overline{(220)}$
e

$2(20)(20)(211)$
e

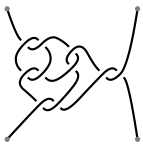
$2(20)(20)(210)1$
e

$2(20)(20)\overline{(31)}$
e

$2(20)(20)\overline{(30)}1$
e

$2(20)(20)\overline{(30)1}$
e

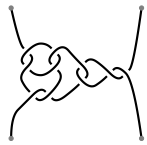
$2(20)(20)(21)1$
e


$2(20)(20)(20)2$
e

$2(20)(20)(20)\overline{2}$
e

$2(20)(20)(20)(20)$
e

$2(20)(20)(20)\overline{(20)}$
e


$2(20)(20)\overline{(22)}$
e

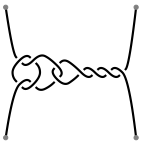
$2(20)(20)\overline{(21)1}$
e

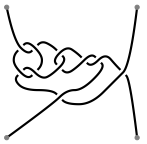
$2(20)(20)\overline{(20)}2$
e

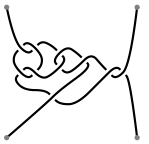
$2(20)(20)\overline{(20)2}$
e

$2(20)(20)\overline{(20)}(20)$
e

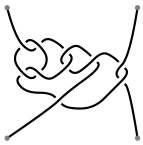
$2(20)(20)\overline{(20)(20)}$
e


$2(20)\overline{(24)}$
x

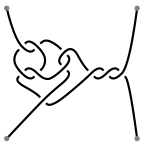

$\overline{2(20)}(22)11$
y


$\overline{2(20)}(21)12$
z

$\overline{2(20)}(21)111$
x


$\overline{2(20)}(21)1(20)$
e

$2(20)\overline{(22)}(20)$
e


$\overline{2(20)}(20)13$
y

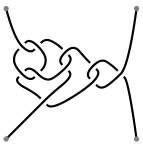
$\overline{2(20)}(20)121$
y

$\overline{2(20)}(20)112$
x

$\overline{2(20)}(20)111$
z

$\overline{2(20)}(20)1(30)$
e

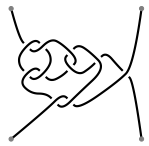
$2(20)\overline{(21)}(30)$
e


$\overline{2(20)}(20)1(21)$
e

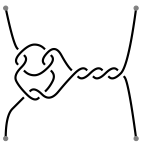
$\overline{2(20)}(20)1(210)$
e

$2(20)\overline{(21)}(210)$
e

$\overline{2(20)}(20)1(20)1$
e


$2(20)\overline{(21)}(20)1$
e

$2(20)\overline{(21)}(20)\overline{1}$
e

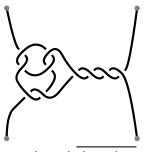

$2(20)\overline{(20)}4$
y

Tangles 2657 – 2719 (with loops)

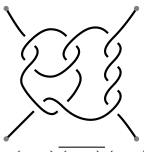
$2(20)\overline{(20)}31$
y

$2(20)\overline{(20)}22$
x

$2(20)\overline{(20)}211$
z

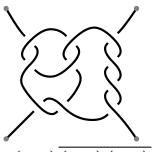


$2(20)\overline{(20)4}$
y

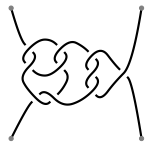


$2(20)\overline{(20)}(40)$
e

$2(20)\overline{(20)}(310)$
e



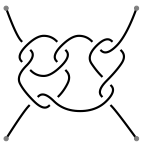
$2(20)\overline{(20)(40)}$
e



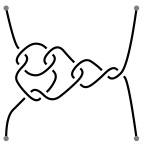
$2(20)\overline{(20)}(31)$
e

$2(20)\overline{(20)}(30)1$
e

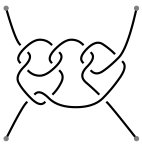
$2(20)\overline{(20)}(30)\overline{1}$
e



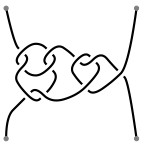
$2(20)\overline{(20)}(220)$
e



$2(20)\overline{(20)}(22)$
e



$2(20)\overline{(20)}(2110)$
e



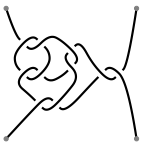
$2(20)\overline{(20)}(211)$
e

$2(20)\overline{(20)}(210)1$
e

$2(20)\overline{(20)(30)}1$
e

$2(20)\overline{(20)}(21)1$
e

$2(20)\overline{(20)}(20)2$
e



$2(20)\overline{(20)}(20)\overline{2}$
e

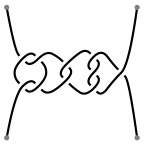
$2(20)\overline{(20)}(20)(20)$
e

$2(20)\overline{(20)}(20)\overline{(20)}$
e

$\overline{2(20)}(20)(20)11$
e

$2(20)\overline{(20)(20)}2$
e

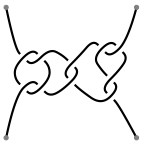
$2(20)\overline{(20)(20)}(20)$
e



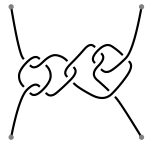
$2(20)(2(31))$
x

$2(20)(2(30))1$
z

$2(20)(2(30))\overline{1}$
z

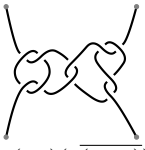


$2(20)(2(220))$
x

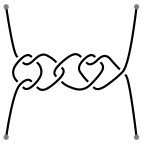


$2(20)(2(2110))$
x

$2(20)(2\overline{(220)}0)$
e

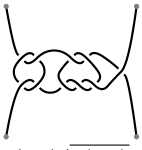


$2(20)(2\overline{(220)})$
x



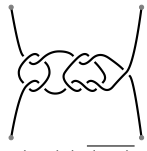
$2(20)(2(211))$
x

$2(20)(2(210))1$
z



$2(20)(\overline{2(30)}1)$
e

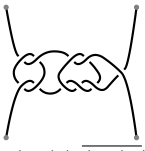
$2(20)\overline{(2(30)0)}1$
e



$2(20)(2\overline{(30)}1)$
e

$2(20)(2\overline{(30)}0)1$
e

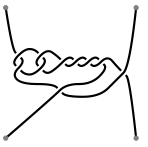
$2(20)(2\overline{(30)}0)\overline{1}$
e



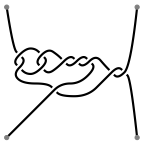
$2(20)(2\overline{(30)}1)$
e

$2(20)(2\overline{(30)})1$
z

$2(20)(2\overline{(30)})\overline{1}$
z

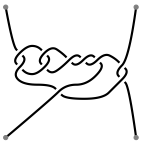


$2(24)11$
$z\rho$

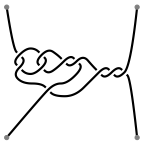


$2(23)12$
$z\rho$

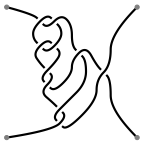
$2(23)111$
$z\rho$



$2(23)1(20)$
x

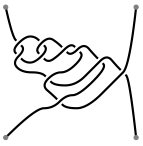


$2(22)13$
$z\rho$

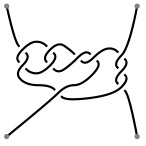


$2(22)121$
$z\rho$

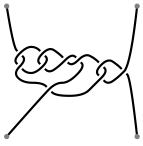
$2(22)112$
$z\rho$



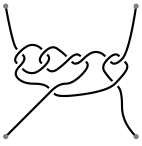
$2(22)1111$
$z\rho$



$2(22)1(30)$
x

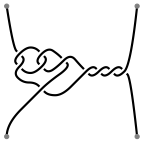


$2(22)1(21)$
x



$2(22)1(210)$
x

$2(22)1(20)1$
z



$2(21)14$
$z\rho$

$2(21)131$
$z\rho$

$2(21)122$
$z\rho$

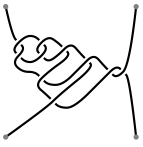
$2(21)1211$
$z\rho$

$2(21)12(20)$
x

$2(21)12\overline{(20)}$
x

$2(21)113$
$z\rho$

$2(21)1121$
$z\rho$



$2(21)1112$
$z\rho$

$2(21)11111$
$z\rho$

Tangles 2720 – 2782 (with loops)

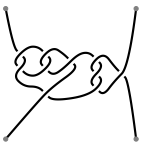
2(2 1)1 1 1(2 0)
x

2(2 1)1 1(3 0)
x

2(2 1)1 1(2 1 0)
x

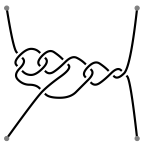
2(2 1)1 1$\overline{(3\,0)}$
x

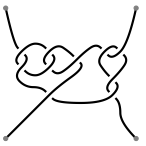
2(2 1)1(4 0)
x

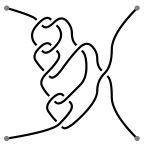

2(2 1)1(3 1)
x

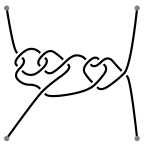
2(2 1)1(3 1 0)
x

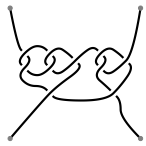
2(2 1)1(3 0)1
z


2(2 1)1(2 2)
x


2(2 1)1(2 2 0)
x


2(2 1)1(2 1)1
z


2(2 1)1(2 1 1)
x


2(2 1)1(2 1 1 0)
x

2(2 1)1(2 1 0)1
z

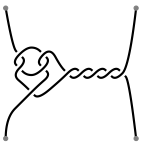
2(2 1)1(2 0)2
y

2(2 1)1(2 0)$\overline{2}$
y

2(2 1)1(2 0)(2 0)
e

2(2 1)1(2 0)$\overline{(2\,0)}$
e

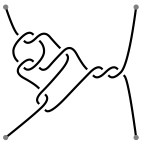
2(2 2)(2 0)1 1
y


2(2 0)1 5
$z\rho$

2(2 0)1 4 1
$z\rho$

2(2 0)1 3 2
$z\rho$

2(2 0)1 3 1 1
$z\rho$


2(2 0)1 2 3
$z\rho$

2(2 0)1 2 2 1
$z\rho$

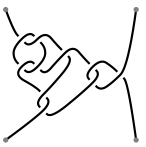
2(2 0)1 2 1 2
$z\rho$

2(2 0)1 2 1 1 1
$z\rho$

2(2 0)1 2(3 0)
x

2(2 0)1 2(2 1 0)
x

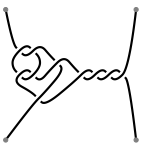
2(2 0)1 2$\overline{(3\,0)}$
x


2(2 0)1 2(2 1)
x

2(2 0)1 2(2 0)1
z

2(2 0)1 2(2 0)$\overline{1}$
z

2(2 0)1 2$\overline{(2\,0)1}$
z


2(2 0)1 1 4
$z\rho$

2(2 0)1 1 3 1
$z\rho$

2(2 0)1 1 2 2
$z\rho$

2(2 0)1 1 2 1 1
$z\rho$

2(2 0)1 1 2(2 0)
x

2(2 0)1 1 2$\overline{(2\,0)}$
x

2(2 0)1 1 1 3
$z\rho$

2(2 0)1 1 1 2 1
$z\rho$

2(2 0)1 1 1 1 2
$z\rho$

2(2 0)1 1 1 1 1 1
$z\rho$

2(2 0)1 1 1 1(2 0)
x

2(2 0)1 1 1(3 0)
x

2(2 0)1 1 1(2 1 0)
x

2(2 0)1 1 1$\overline{(3\,0)}$
x

2(2 0)1 1 1(2 1)
x

2(2 0)1 1 1(2 0)1
z

2(2 0)1 1(3 1)
x

2(2 0)1 1(3 0)1
z

2(2 0)1 1(2 2 0)
x

2(2 0)1 1(2 1 1 0)
x

2(2 0)1 1$\overline{(2\,2\,0)}$
x

2(2 0)1 1(2 1 1)
x

2(2 0)1 1(2 1 0)1
z

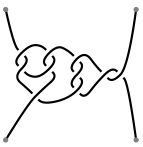
2(2 0)1 1$\overline{(3\,0)}$1
z

2(2 0)1(5 0)
x

2(2 0)1(4 1)
x

2(2 0)1(4 1 0)
x

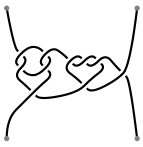
2(2 0)1(4 0)1
z


2(2 0)1(3 2)
x

Tangles 2783 – 2845 (with loops)

$2(20)1(320)$
x

$2(20)1(31)1$
z



$2(20)1(311)$
x

$2(20)1(3110)$
x

$2(20)1(310)1$
z

$2(20)1(30)2$
y

$2(20)1(30)\overline{2}$
y

$2(21)(210)11$
y

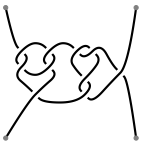
$2(20)1(3(20))$
x

$\overline{2(21)}(3\overline{(20)})$
x

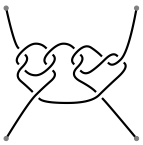
$2(20)1(23)$
x

$2(20)1(230)$
x

$2(20)1(22)1$
z



$2(20)1(221)$
x



$2(20)1(2210)$
x

$2(20)1(220)1$
z

$2(20)1(21)2$
y

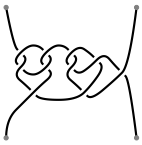
$2(20)1(21)(20)$
e

$2(20)1(21)\overline{(20)}$
e

$2(20)1(212)$
x

$2(20)1(2120)$
x

$2(20)1(211)1$
z



$2(20)1(2111)$
x

$2(20)1(2110)$
x

$\overline{2(21)}(2110)$
x

$2(20)1(2110)1$
z

$\overline{2(21)}(210)1$
z

$2(20)1(210)2$
y

$2(20)1(210)\overline{2}$
y

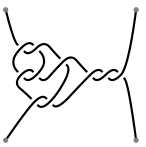
$2(20)1(210)(20)$
e

$2(20)1(210)\overline{(20)}$
e

$2(21)(30)11$
y

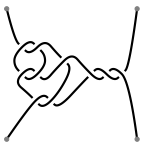
$2(20)1(21(20))$
x

$2(20)1\overline{(2(30)0)}$
e



$2(20)1(20)3$
z

$2(20)1(20)21$
x



$2(20)1(20)\overline{3}$
z

$2(20)1(20)(30)$
e

$2(20)1(20)\overline{(210)}$
e

$2(20)1(20)(210)$
e

$2(20)1(20)\overline{(30)}$
e

$2(20)1(20)(21)$
e

$2(20)1(20)(20)1$
e

$2(20)1(20)(20)\overline{1}$
e

$2(20)1(20)\overline{(21)}$
e

$2(20)1(20)\overline{(20)1}$
e

$2(21)(21)11$
y

$2(21)(20)12$
z

$2(21)(20)111$
x

$2(21)(20)1(20)$
e

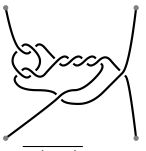
$\overline{2(21)(20)}21$
x

$2(20)1(2(30))$
x

$2(20)1(2(210))$
x

$2(20)1(\overline{3}(20)0)$
e

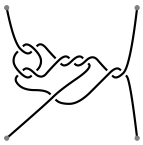
$\overline{2(21)}(2\overline{(30)})$
x



$\overline{2(20)}411$
$z\rho$

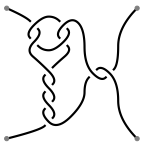
$2(20)\overline{51}$
$z\rho$

$\overline{2(20)}321$
$z\rho$



$\overline{2(20)}312$
$z\rho$

$\overline{2(20)}3111$
$z\rho$



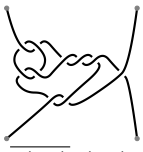
$2(20)\overline{42}$
$z\rho$

$\overline{2(20)}3(210)$
x

$\overline{2(20)}3\overline{(30)}$
x

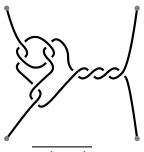
Tangles 2846 – 2908 (with loops)

$\overline{2(20)}3(21)$
x



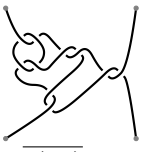
$\overline{2(20)}3(20)1$
z

$\overline{2(20)}3\overline{(20)1}$
z



$\overline{2(20)}24$
$z\rho$

$\overline{2(20)}231$
$z\rho$

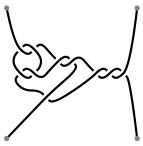


$\overline{2(20)}222$
$z\rho$

$\overline{2(20)}2211$
$z\rho$

$\overline{2(20)}22(20)$
x

$\overline{2(20)}22\overline{(20)}$
x



$\overline{2(20)}213$
$z\rho$

$\overline{2(20)}2121$
$z\rho$

$\overline{2(20)}2112$
$z\rho$

$\overline{2(20)}21111$
$z\rho$

$\overline{2(20)}211(20)$
x

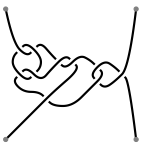
$2(20)\overline{33}$
$z\rho$

$\overline{2(20)}21(30)$
x

$\overline{2(20)}21(210)$
x

$2(20)\overline{3(30)}$
x

$\overline{2(20)}21\overline{(30)}$
x



$\overline{2(20)}21(21)$
x

$\overline{2(20)}21(20)1$
z

$2(20)\overline{3(20)}1$
z

$\overline{2(20)}2(31)$
x

$\overline{2(20)}2(30)1$
z

$\overline{2(20)}2(220)$
x

$\overline{2(20)}2(2110)$
x

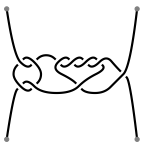
$\overline{2(20)}2\overline{(220)}$
x

$\overline{2(20)}2(211)$
x

$\overline{2(20)}2(210)1$
z

$\overline{2(20)}2\overline{(30)}1$
z

$\overline{2(20)}(4110)$
x

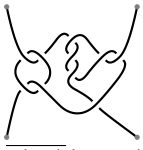


$\overline{2(20)}(411)$
x

$\overline{2(20)}(410)1$
z

$\overline{2(20)}(41)1$
z

$2(20)(310)11$
y



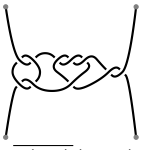
$\overline{2(20)}(3210)$
x

$\overline{2(20)}(321)$
x

$\overline{2(20)}(320)1$
z

$\overline{2(20)}(32)1$
z

$\overline{2(20)}(3120)$
x



$\overline{2(20)}(312)$
x

$\overline{2(20)}(3110)$
x

$\overline{2(20)}(3111)$
x

$\overline{2(20)}(3110)1$
z

$\overline{2(20)}(311)1$
z

$\overline{2(20)}(310)2$
y

$\overline{2(20)}(310)(20)$
e

$2(20)(40)11$
y

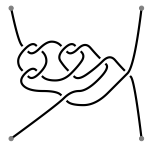
$\overline{2(20)}(31)2$
y

$\overline{2(20)}(30)21$
x

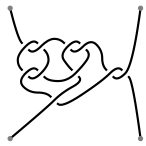
$\overline{2(20)}(30)(210)$
e

$\overline{2(20)}(30)(21)$
e

$\overline{2(20)}(30)(20)1$
e



$2(20)(211)11$
y

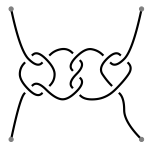


$2(20)(210)12$
z

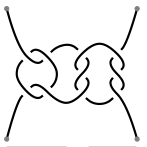
$2(20)(210)111$
x

$2(20)(210)1(20)$
e

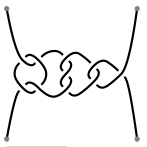
$\overline{2(20)(210)}21$
x



$\overline{2(20)}(3(210))$
x



$\overline{2(20)}(3\overline{(30)})$
x

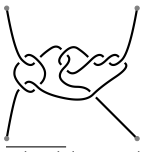


$\overline{2(20)}(3(21))$
x

$\overline{2(20)}(3(20))1$
z

$\overline{2(20)}(3\overline{(20)})\overline{1}$
z

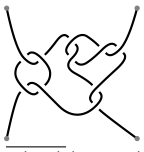
Tangles 2909 – 2971 (with loops)

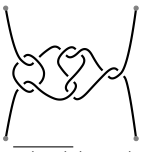

$\overline{2(20)}(2310)$
x

$\overline{2(20)}(231)$
x

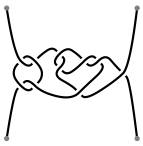
$\overline{2(20)}(230)1$
z

$\overline{2(20)}(23)1$
z


$\overline{2(20)}(2220)$
x


$\overline{2(20)}(222)$
x

$\overline{2(20)}(2211 0)$
x


$\overline{2(20)}(2211)$
x

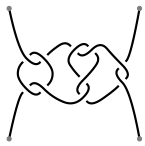
$\overline{2(20)}(2210)1$
z

$\overline{2(20)}(221)1$
z

$\overline{2(20)}(220)2$
y

$2(20)(2110)11$
y

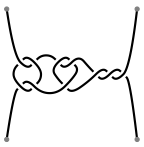
$\overline{2(20)}(22(20))$
x


$\overline{2(20)}(22\overline{(20)})$
x

$\overline{2(20)}(22)2$
y

$\overline{2(20)}(22)(20)$
e

$\overline{2(20)}(2130)$
x


$\overline{2(20)}(213)$
x

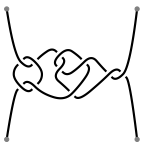
$\overline{2(20)}(2120)$
x

$\overline{2(20)}(212)1$
x

$\overline{2(20)}(2120)1$
z

$\overline{2(20)}(212)1$
z

$\overline{2(20)}(2112 0)$
x


$\overline{2(20)}(2112)$
x

$\overline{2(20)}(211110)$
x

$\overline{2(20)}(2111 1)$
x

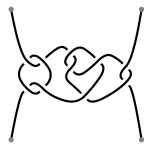
$\overline{2(20)}(211 10)1$
z

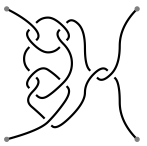
$\overline{2(20)}(2111)1$
z

$\overline{2(20)}(2110)2$
y

$\overline{2(20)}(2110)(20)$
e

$2(20)(220)11$
y


$\overline{2(20)}(211(20))$
x


$\overline{2(20)}(211)2$
y

$\overline{2(20)}(211)(20)$
e

$\overline{2(20)}(210)3$
z

$\overline{2(20)}(210)21$
x

$\overline{2(20)}(210)(30)$
e

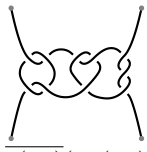
$\overline{2(20)}(210)(210)$
e

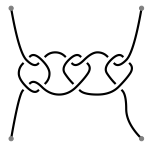
$2(20)(31)11$
y

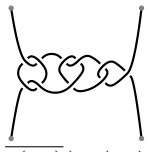
$2(20)(30)12$
z

$2(20)(30)111$
x

$\overline{2(20)}(30)21$
x

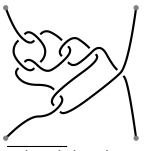

$\overline{2(20)}(21(30))$
x


$\overline{2(20)}(21(210))$
x


$\overline{2(20)}(21(21))$
x

$\overline{2(20)}(21(20))1$
z

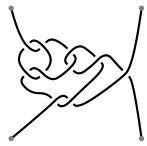
$\overline{2(20)}(21)3$
z


$\overline{2(20)}(21)21$
x

$\overline{2(20)}(21)(30)$
e

$\overline{2(20)}(21)(210)$
e

$\overline{2(20)}(21)(21)$
e


$\overline{2(20)}(21)(20)1$
e

$\overline{2(20)}(20)31$
y

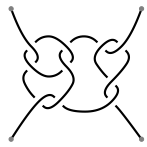
$\overline{2(20)}(20)22$
x

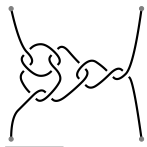
$\overline{2(20)}(20)211$
z

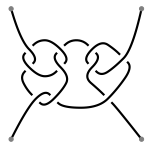
$\overline{2(20)}(20)(310)$
e

$\overline{2(20)}(20)(31)$
e

$\overline{2(20)}(20)(30)1$
e


$\overline{2(20)}(20)(220)$
e


$\overline{2(20)}(20)(22)$
e


$\overline{2(20)}(20)(2110)$
e

$\overline{2(20)}(20)(211)$
e

$\overline{2(20)}(20)(210)1$
e

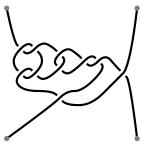
Tangles 2972 – 3034 (with loops)

$\overline{2(20)}(20)(21)1$
e

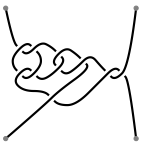
$\overline{2(20)}(20)(20)2$
e

$\overline{2(20)}(20)(20)(20)$
e

$2(20)\overline{(20)}(20)11$
e



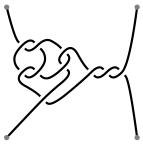
$2(20)(22)11$
y



$2(20)(21)12$
z

$2(20)(21)111$
x

$2(20)(21)1(20)$
e



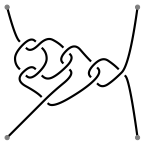
$2(20)(20)13$
y

$2(20)(20)121$
y

$2(20)(20)112$
x

$2(20)(20)1111$
z

$2(20)(20)1(30)$
e



$2(20)(20)1(21)$
e

$2(20)(20)1(210)$
e

$2(20)(20)1(20)1$
e

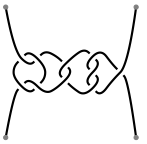
$2(20)(20)\overline{211}$
z

$\overline{2(20)(20)}22$
x

$2(20)(20)\overline{31}$
y

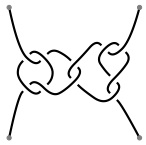
$2(20)(20)\overline{(20)11}$
e

$2(20)(20)(20)11$
e

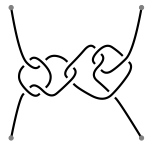


$\overline{2(20)}(2(31))$
x

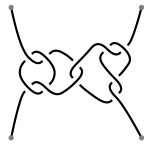
$\overline{2(20)}(2(30))1$
z



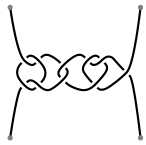
$\overline{2(20)}(2(220))$
x



$\overline{2(20)}(2(2110))$
x



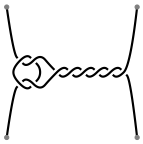
$\overline{2(20)}(2\overline{(220)})$
x



$\overline{2(20)}(2(211))$
x

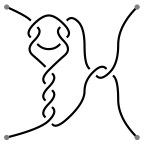
$\overline{2(20)}(2(210))1$
z

$\overline{2(20)}(2\overline{(30)})1$
z

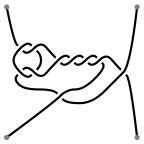


$2\overline{(20)}6$
$z\rho$

$2\overline{(20)}51$
$z\rho$



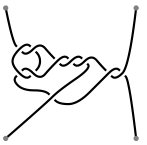
$2\overline{(20)}42$
$z\rho$



$2\overline{(20)}411$
$z\rho$

$2\overline{(20)}33$
$z\rho$

$2\overline{(20)}321$
$z\rho$



$2\overline{(20)}312$
$z\rho$

$2\overline{(20)}3111$
$z\rho$

$2\overline{(20)}3(30)$
x

$2\overline{(20)}3(210)$
x

$2\overline{(20)}3\overline{(30)}$
x

$2\overline{(20)}3(21)$
x

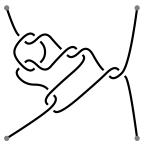
$2\overline{(20)}3(20)1$
z

$2\overline{(20)}3(20)\overline{1}$
z

$2\overline{(20)}3\overline{(20)1}$
z

$2\overline{(20)}24$
$z\rho$

$2\overline{(20)}231$
$z\rho$

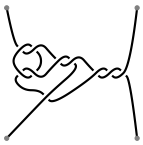


$2\overline{(20)}222$
$z\rho$

$2\overline{(20)}2211$
$z\rho$

$2\overline{(20)}22(20)$
x

$2\overline{(20)}22\overline{(20)}$
x



$2\overline{(20)}213$
$z\rho$

$2\overline{(20)}2121$
$z\rho$

$2\overline{(20)}2112$
$z\rho$

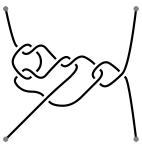
$2\overline{(20)}21111$
$z\rho$

$2\overline{(20)}211(20)$
x

$2\overline{(20)}21(30)$
x

$2\overline{(20)}21(210)$
x

$2\overline{(20)}21\overline{(30)}$
x



$2\overline{(20)}21(21)$
x

$2\overline{(20)}21(20)1$
z

$2\overline{(20)}2(31)$
x

$2\overline{(20)}2(30)1$
z

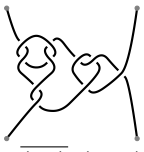
$2\overline{(20)}2(30)\overline{1}$
z

Tangles 3035 – 3097 (with loops)

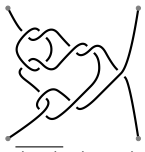
$2(\overline{2\,0})2(2\,2\,0)$
x

$2(\overline{2\,0})2(2\,1\,1\,0)$
x

$2(\overline{2\,0})2(\overline{2\,2\,0})$
x



$2(\overline{2\,0})2(2\,1\,1)$
x



$2(\overline{2\,0})2(2\,1\,0)1$
z

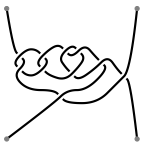
$2(\overline{2\,0})2(\overline{3\,0})1$
z

$2(\overline{2\,0})2(\overline{3\,0})1$
z

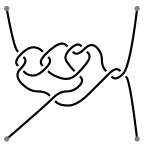
$2(2(\overline{5\,0}))1$
z

$2(2(\overline{3\,2\,0}))1$
z

$\overline{2}(3(2\,1)\overline{(2\,0)})$
y



$2(2(2\,1\,1))1\,1$
y

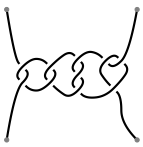


$2(2(2\,1\,0))1\,2$
z

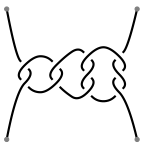
$2(2(2\,1\,0))1\,1\,1$
x

$2(2(2\,1\,0))1(2\,0)$
e

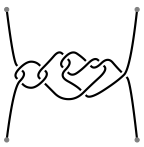
$2(2(2\,1\,0)1(2\,0))$
z



$2(2(3(2\,1\,0)))$
x



$2(2(3\overline{(3\,0)}))$
x

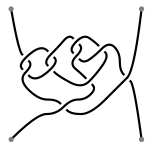


$2(2(2\,2\,1\,1))$
x

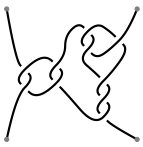
$2(2(2\,2\,1\,0))1$
z

$2(2\overline{(2\,3\,0)})1$
z

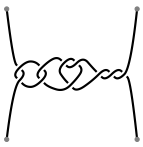
$\overline{2}(2\,2(2\,0)\overline{(2\,0)})$
y



$2(2(2\,1\,1\,0))1\,1$
y



$2(2(2\,1\,3\,0))$
x

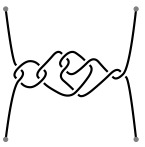


$2(2(2\,1\,3))$
x

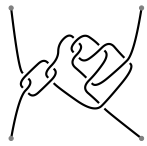
$2(2(2\,1\,2\,1\,0))$
x

$2(2(2\,1\,2))1$
z

$2(2(2\,1\,1\,2\,0))$
x



$2(2(2\,1\,1\,2))$
x



$2(2(2\,1\,1\,1\,1\,0))$
x

$2(2(2\,1\,1\,1))1$
z

$2(2(2\,1\,1\,0)(2\,0))$
y

$2(2(2\,1\,1\,0)\overline{(2\,0)})$
z

$2(2(2\,1\,1\,0))2$
y

$2(2(2\,1\,1\,0))\overline{2}$
y

$2(2(2\,1\,1\,0))(2\,0)$
e

$2(2(2\,1\,1\,0))\overline{(2\,0)}$
e

$2(2\overline{(2\,2\,0)}2\,0)$
x

$\overline{2}(2\overline{(2\,2\,0)}2\,0)$
x

$2(2\overline{(2\,2\,0)}(2\,0))$
y

$2(2\overline{(2\,2\,0)})2$
y

$2(2\overline{(2\,2\,0)})(2\,0)$
e

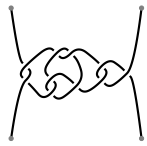
$2(2(2\,1\,1)(2\,0))$
y

$2(2(2\,1\,1)\overline{(2\,0)})$
z

$2(2(2\,1\,1))2$
y

$2(2(2\,1\,1))(2\,0)$
e

$2(2(2\,1\,1))\overline{(2\,0)}$
e



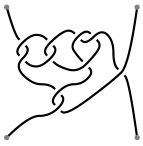
$2(2(2\,1\,0)(2\,1))$
z

$2(2(2\,1\,0)(2\,0))1$
x

$2(2(2\,1\,0)(2\,0))\overline{1}$
x

$2(2(2\,1\,0)\overline{(2\,0)})\overline{1}$
y

$2(2(2\,1\,0))3$
z



$2(2(2\,1\,0))2\,1$
x

$2(2(2\,1\,0))\overline{3}$
z

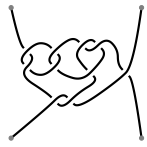
$2(2(2\,1\,0))(3\,0)$
e

$2(2(2\,1\,0))\overline{(2\,1\,0)}$
e

$2(2(2\,1\,0))(2\,1\,0)$
e

$2(2(2\,1\,0))\overline{(3\,0)}$
e

$2(2(2\,1\,0))(2\,1)$
e



$2(2(2\,1\,0))(2\,0)1$
e

$2(2(2\,1\,0))(2\,0)\overline{1}$
e

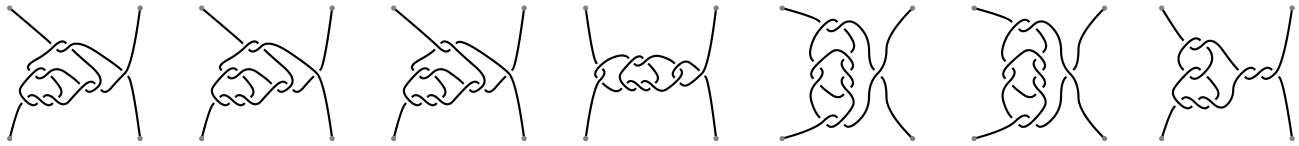
$2(2(2\,1\,0))\overline{(2\,1)}$
e

$2(2(2\,1\,0))\overline{(2\,0)1}$
e

$\overline{2(2(3\,0))}2\,1$
x

Tangles 3098 – 3160 (with loops)

$2(\overline{2(3\,0)}(2\,1))$ z | $2(\overline{2(3\,0)}(2\,0))1$ x | $2\overline{(2(3\,0))}2\,1$ x | $2\overline{(2(3\,0))}(2\,1\,0)$ e | $2\overline{(2(3\,0))}(2\,1)$ e | $2\overline{(2(3\,0))}(2\,0)1$ e | $2(2\overline{(3\,0)}2\,1)$ x

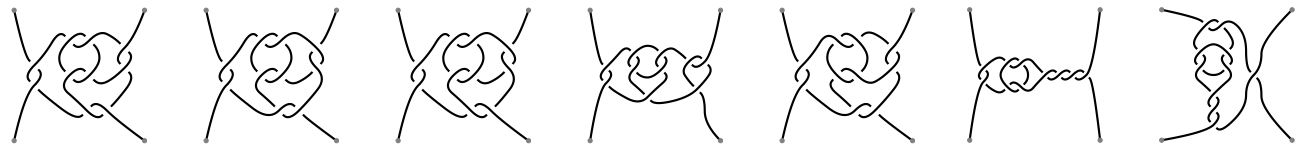


$2(2\overline{(3\,0)}2\,0)1$ z | $2(2\overline{(3\,0)}2\,0)\overline{1}$ z | $\overline{2}(2\overline{(3\,0)}2\,0)\overline{1}$ z | $2(2\overline{(3\,0)}(2\,1))$ z | $2(2\overline{(3\,0)}(2\,0))1$ x | $2(2\overline{(3\,0)}(2\,0))\overline{1}$ x | $2(2\overline{(3\,0)})3$ z

$2(2\overline{(3\,0)})2\,1$ x | $2(2\overline{(3\,0)})(3\,0)$ e | $2(2\overline{(3\,0)})(2\,1\,0)$ e | $2(2\overline{(3\,0)})(2\,1)$ e | $2(2\overline{(3\,0)})(2\,0)1$ e | $2(2\overline{(3\,0)})(2\,0)\overline{1}$ e | $2(2(2\,1(2\,1\,0)))$ x

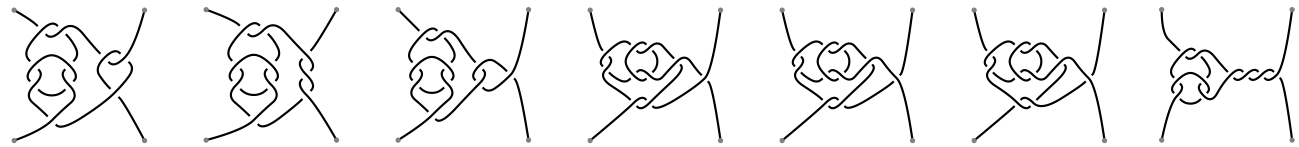
$2(2(2\,1\overline{(3\,0)}))$ x | $2(2(2\,1)(2\,1\,0))$ x | $\overline{2}(2(2\,1)\overline{(3\,0)})$ x | $2(2(2\,1)\overline{(3\,0)})$ x | $2(2(2\,0)0)(2\,0)\overline{(2\,0)}$ e | $2(2(2\,0)0)\overline{(2\,0)(2\,0)}$ e | $\overline{2}(2(2\,0)0)(2\,0)\overline{(2\,0)}$ e

$2(2(2\,0)(2\,1\,1\,0))$ x | $2(2(2\,0)\overline{(2\,2\,0)})$ x | $2(2(2\,0)(2\,1\,1))$ x | $2(2(2\,0)(2\,1\,0))1$ z | $2(2(2\,0)\overline{(3\,0)})1$ z | $2(2(2\,0)\overline{(3\,0)})\overline{1}$ z | $2(2(2\,0)(2\,0)(2\,0)0)$ e

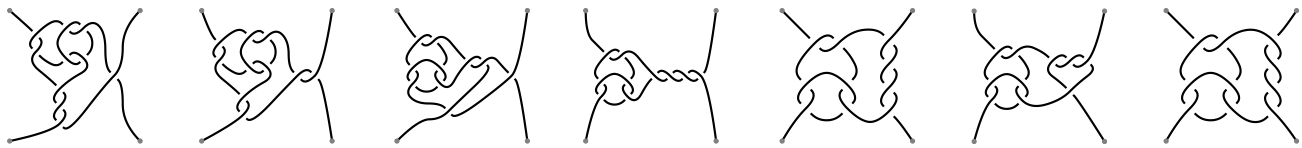


$2(2(2\,0)(2\,0)\overline{(2\,0)}0)$ e | $2(2(2\,0)\overline{(2\,0)}(2\,0)0)$ e | $2(2(2\,0)\overline{(2\,0)(2\,0)}0)$ e | $2(2(2\,0)1(2\,1\,0))$ x | $2(\overline{2(2\,0)}(2\,0)(2\,0)0)$ e | $2(2\overline{(2\,0)}4)$ $z\rho$ | $2(2\overline{(2\,0)}3)1$ $z\rho$

$2(2\overline{(2\,0)}2)2$ $z\rho$ | $2(2\overline{(2\,0)}2)(2\,0)$ x | $2(2\overline{(2\,0)}2)\overline{(2\,0)}$ x | $2(2\overline{(2\,0)}1)3$ $z\rho$ | $2(2\overline{(2\,0)}1)2\,1$ $z\rho$ | $2(2\overline{(2\,0)}1)(3\,0)$ x | $2(2\overline{(2\,0)}1)\overline{(2\,1\,0)}$ x



$2(2\overline{(2\,0)}1)(2\,1\,0)$ x | $2(2\overline{(2\,0)}1)\overline{(3\,0)}$ x | $2(2\overline{(2\,0)}1)(2\,1)$ x | $2(2\overline{(2\,0)}1)(2\,0)1$ z | $2(2\overline{(2\,0)}1)(2\,0)\overline{1}$ z | $2(2\overline{(2\,0)}1)\overline{(2\,0)1}$ z | $2(2\overline{(2\,0)}0)4$ $z\rho$



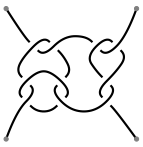
$2(2\overline{(2\,0)}0)3\,1$ $z\rho$ | $2(2\overline{(2\,0)}0)2\,2$ $z\rho$ | $2(2\overline{(2\,0)}0)2\,1\,1$ $z\rho$ | $2(2\overline{(2\,0)}0)\overline{4}$ $z\rho$ | $2(2\overline{(2\,0)}0)(4\,0)$ x | $2(2\overline{(2\,0)}0)(3\,1\,0)$ x | $2(2\overline{(2\,0)}0)\overline{(4\,0)}$ x

Tangles 3161 – 3223 (with loops)

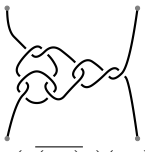
$2(2(\overline{2\,0})0)(3\,1)$
x

$2(2(\overline{2\,0})0)(3\,0)1$
z

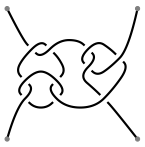
$2(2(\overline{2\,0})0)(3\,0)\overline{1}$
z



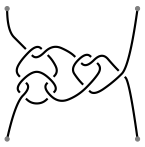
$2(2(\overline{2\,0})0)(2\,2\,0)$
x



$2(2(\overline{2\,0})0)(2\,2)$
x



$2(2(\overline{2\,0})0)(2\,1\,1\,0)$
x



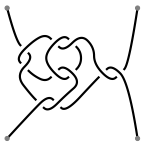
$2(2(\overline{2\,0})0)(2\,1\,1)$
x

$2(2(\overline{2\,0})0)(2\,1\,0)1$
z

$2(2(\overline{2\,0})0)\overline{(3\,0)}1$
z

$2(2(\overline{2\,0})0)(2\,1)1$
z

$2(2(\overline{2\,0})0)(2\,0)2$
y



$2(2(\overline{2\,0})0)(2\,0)\overline{2}$
y

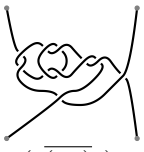
$2(2(\overline{2\,0})0)(2\,0)(2\,0)$
e

$2(2(\overline{2\,0})0)(2\,0)\overline{(2\,0)}$
e

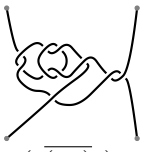
$\overline{2}(\overline{2}(2\,0)0)(2\,0)1\,1$
y

$2(2(\overline{2\,0})0)\overline{(2\,0)}2$
y

$2(2\overline{(2\,0)0)\overline{(2\,0)}(2\,0)}$
e

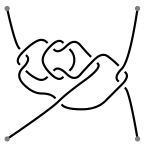


$2(2(\overline{2\,0})2)1\,1$
$z\rho$

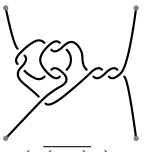


$2(2(\overline{2\,0})1)1\,2$
$z\rho$

$2(2(\overline{2\,0})1)1\,1\,1$
$z\rho$

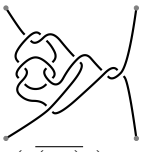


$2(2(\overline{2\,0})1)1(2\,0)$
x



$2(2(\overline{2\,0})0)1\,3$
$z\rho$

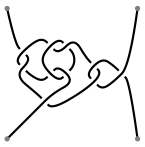
$2(2(\overline{2\,0})0)1\,2\,1$
$z\rho$



$2(2(\overline{2\,0})0)1\,1\,2$
$z\rho$

$2(2(\overline{2\,0})0)1\,1\,1\,1$
$z\rho$

$2(2(\overline{2\,0})0)1(3\,0)$
x



$2(2(\overline{2\,0})0)1(2\,1)$
x

$2(2(\overline{2\,0})0)1(2\,1\,0)$
x

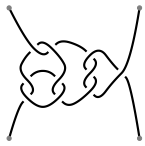
$2(2(\overline{2\,0})0)1(2\,0)1$
z

$\overline{2}(\overline{2}(2\,0)0)3\,1$
$z\rho$

$\overline{2}(\overline{2}(2\,0)0)2\,2$
$z\rho$

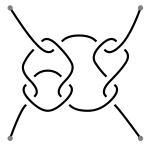
$\overline{2}(\overline{2}(2\,0)0)2\,1\,1$
$z\rho$

$\overline{2}(\overline{2}(2\,0)0)(3\,1\,0)$
x

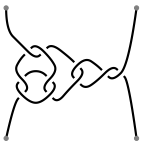


$\overline{2}(\overline{2}(2\,0)0)(3\,1)$
x

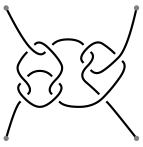
$\overline{2}(\overline{2}(2\,0)0)(3\,0)1$
z



$\overline{2}(\overline{2}(2\,0)0)(2\,2\,0)$
x



$\overline{2}(\overline{2}(2\,0)0)(2\,2)$
x

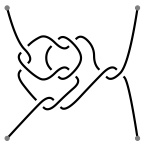


$\overline{2}(\overline{2}(2\,0)0)(2\,1\,1\,0)$
x

$\overline{2}(\overline{2}(2\,0)0)(2\,1\,1)$
x

$\overline{2}(\overline{2}(2\,0)0)(2\,1\,0)1$
z

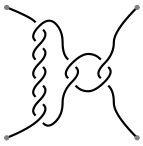
$\overline{2}(\overline{2}(2\,0)0)(2\,1)1$
z



$\overline{2}(\overline{2}(2\,0)0)(2\,0)2$
y

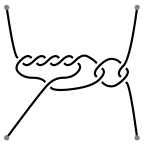
$\overline{2}(\overline{2}(2\,0)0)(2\,0)(2\,0)$
e

$2(2(\overline{2\,0})0)(2\,0)1\,1$
y

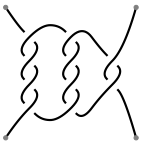


$6(2(2\,0))$
x

$6(2(\overline{2\,0}))$
x



$5\,1(2(2\,0))$
x



$4(4(2\,0))$
x

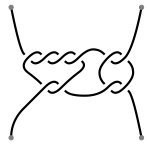
$4(4(\overline{2\,0}))$
x

$4(3\,1(2\,0))$
x

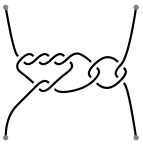
$4(3\,1(\overline{2\,0}))$
x

$4(2\,0)2(2\,0)$
x

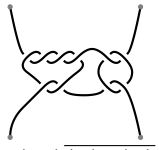
$4(2\,0)2(\overline{2\,0})$
x



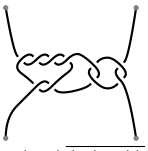
$4(2\,0)(2(2\,0)0)$
e



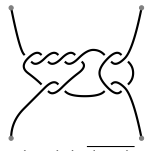
$4(2\,0)(2(2\,0))$
e



$4(2\,0)\overline{(2(2\,0)0)}$
e



$4(2\,0)\overline{(2(2\,0))}$
e



$4(2\,0)(2\overline{(2\,0)}0)$
y

$4(2\,0)(2\overline{(2\,0)})$
e

$3\,1(2\,0)1\,1(2\,0)$
x

$\overline{3\,1(2\,0)}2(2\,0)$
x

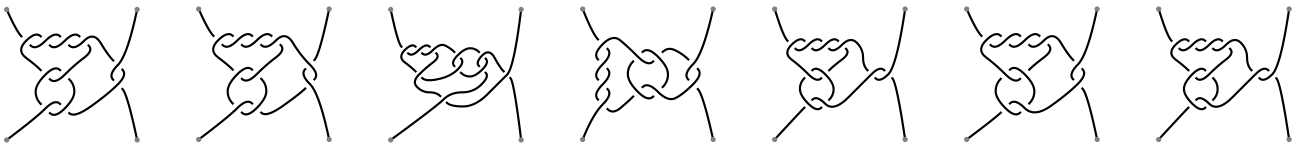
$4\overline{(2\,0)}2(2\,0)$
x

$4\overline{(2\,0)}2\overline{(2\,0)}$
x

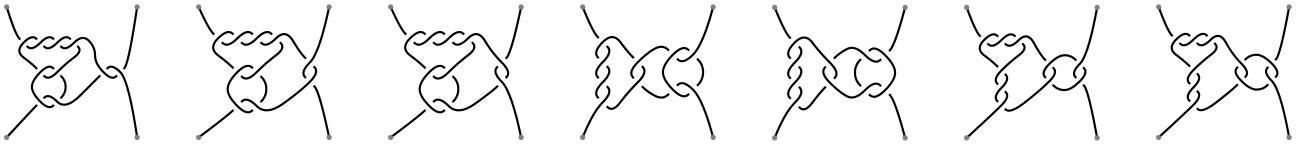
Tangles 3224 – 3286 (with loops)

$4(\overline{2\,0})(2(2\,0)0)$ e | $4(\overline{2\,0})(2(2\,0))$ e | $4(\overline{2\,0})(2(\overline{2\,0})0)$ y | $4(\overline{2\,0})(2(\overline{2\,0}))$ e | $4(2(4\,0))$ $z\rho$ | $4(2(\overline{3\,1\,0}))$ $z\rho$ | $4(2(3\,1\,0))$ x

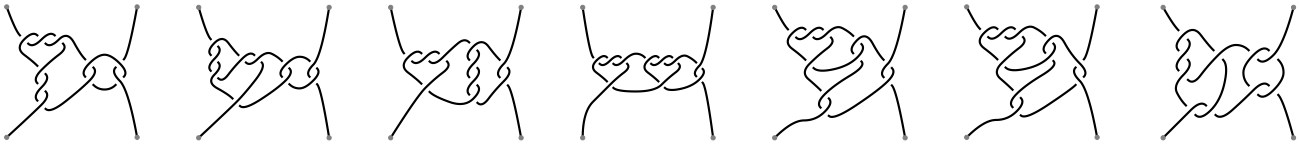
$4(2(\overline{4\,0}))$ x | $4(2(2\,2))$ x | $4(2(2\,1))1$ z | $4(2(2\,0)(2\,0))$ x | $4(2(2\,0)(\overline{2\,0}))$ x | $4(2(2\,0))2$ y | $4(2(2\,0))\overline{2}$ y



$4(2(2\,0))(2\,0)$ e | $4(2(2\,0))(\overline{2\,0})$ e | $3\,1(2(2\,0))1\,1$ y | $4(\overline{2(2\,0)}(2\,0))$ x | $4(\overline{2(2\,0)})2$ y | $4(\overline{2(2\,0)})(2\,0)$ e | $4(2(\overline{2\,0}))2$ y



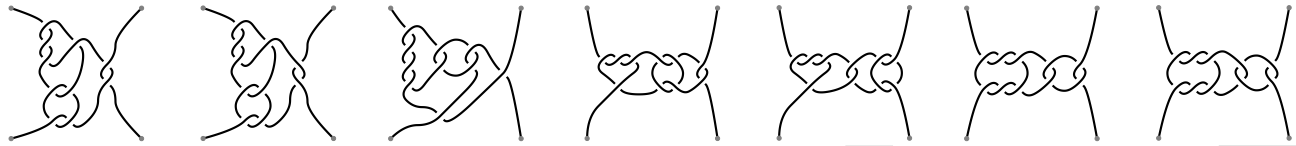
$4(2(\overline{2\,0}))\overline{2}$ y | $4(2(\overline{2\,0}))(2\,0)$ e | $4(2(\overline{2\,0}))(\overline{2\,0})$ e | $4(2(2(\overline{2\,0})0))$ x | $4(\overline{2}(\overline{2}(2\,0)0))$ x | $3\,3(2(2\,0))$ x | $3\,3(\overline{2(2\,0)})$ x



$3\,3(2(\overline{2\,0}))$ x | $3\,2\,1(2(2\,0))$ x | $3\,1(4(2\,0))$ x | $3\,1(3\,1(2\,0))$ x | $3\,1(2\,0)2(2\,0)$ x | $3\,1(2\,0)2(\overline{2\,0})$ x | $3\,1(2\,0)(2(2\,0)0)$ e

$3\,1(2\,0)(2(2\,0))$ e | $3\,1(2\,0)(\overline{2(2\,0)0})$ e | $3\,1(2\,0)(\overline{2(2\,0)})$ e | $3\,1(2\,0)(2(\overline{2\,0})0)$ y | $3\,1(2\,0)(2(\overline{2\,0}))$ e | $4(2\,0)1\,1(2\,0)$ x | $\overline{4(2\,0)}2(2\,0)$ x

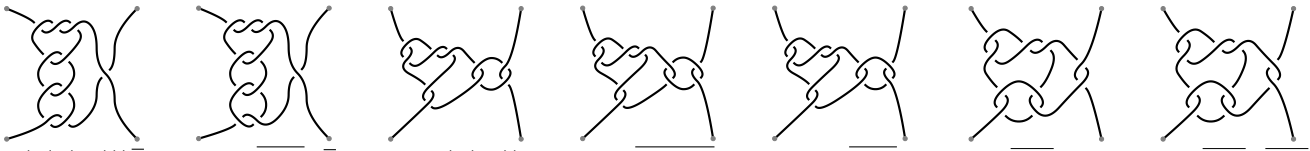
$3\,1(2(3\,1\,0))$ $z\rho$ | $3\,1(2(\overline{4\,0}))$ $z\rho$ | $3\,1(2(2\,2))$ x | $3\,1(2(2\,1))1$ z | $3\,1(2(2\,0)(2\,0))$ x | $3\,1(2(2\,0))2$ y | $3\,1(2(2\,0))\overline{2}$ y



$3\,1(2(2\,0))(2\,0)$ e | $3\,1(2(2\,0))(\overline{2\,0})$ e | $4(2(2\,0))1\,1$ y | $3\,1(\overline{2(2\,0)}(2\,0))$ x | $3\,1(2(\overline{2\,0})0))$ x | $3(3\,0)(2(2\,0))$ x | $3(3\,0)(\overline{2(2\,0)})$ x

$3(3\,0)(2(\overline{2\,0}))$ x | $3(\overline{3\,0})(2(2\,0))$ e | $3(\overline{3\,0})(2(\overline{2\,0}))$ $\overline{x}$ | $3(2(\overline{2\,0})1)(2\,0)$ x | $3(2(\overline{2\,0})1)(\overline{2\,0})$ x | $3(2(2(2\,1)))$ x | $3(2(2(2\,0)))1$ z

Tangles 3287 – 3349 (with loops)

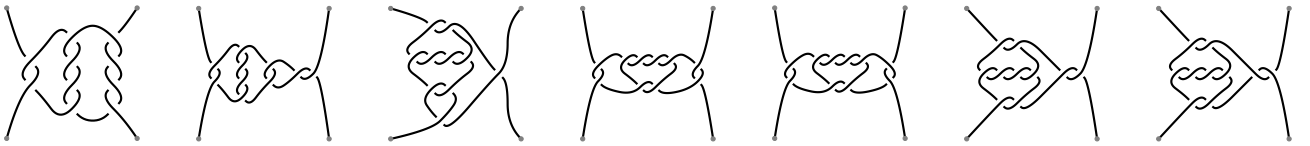


$3(2(2(2\,0)))\overline{1}$ z | $3(2(2\overline{(2\,0)}))\overline{1}$ z | $2\,2\,2(2(2\,0))$ x | $2\,2\,2\overline{(2(2\,0))}$ x | $2\,2\,2(2\overline{(2\,0)})$ x | $2\,2(2\overline{(2\,0)}0)(2\,0)$ x | $2\,2(2\overline{(2\,0)}0)\overline{(2\,0)}$ x

$2\,2(2(2(2\,0)))$ x | $2\,2(2\overline{(2(2\,0))})$ x | $2\,2(2(2\overline{(2\,0)}))$ x | $2\,1\,2(2\overline{(2\,0)})\overline{1}$ z | $2\,1(2\,1\,0)(2(2\,0))$ x | $2\,1(2\,1\,0)\overline{(2(2\,0))}$ x | $2\,1(2\,1\,0)(2\overline{(2\,0)})$ x

$2\,1(2\overline{(2\,0)}0)(2\,1)$ x | $2\,1(2\overline{(2\,0)}0)(2\,0)1$ z | $2\,1(2\overline{(2\,0)}0)(2\,0)\overline{1}$ z | $2\,1(2\overline{(2\,0)}0)\overline{(2\,1)}$ x | $2\,1(2\overline{(2\,0)}0)\overline{(2\,0)}1$ z | $3(2\overline{(2\,0)}0)1(2\,0)$ x | $2(6(2\,0))$ $z\rho$

$2(6\overline{(2\,0)})$ $z\rho$ | $2(5\,1(2\,0))$ $z\rho$ | $2(5\,1\overline{(2\,0)})$ $z\rho$ | $2(4\,0)2(2\,0)$ x | $2(4\,0)2\overline{(2\,0)}$ x | $2(3\,1\,0)1\,1(2\,0)$ x | $\overline{2(3\,1\,0)}2(2\,0)$ x

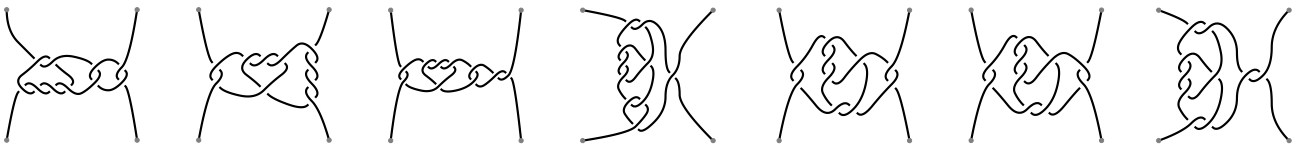


$2(4\overline{(4\,0)})$ x | $2(4(2\,2))$ $z\rho$ | $2(4(2\,1))1$ $z\rho$ | $2(4(2\,0)(2\,0))$ y | $2(4(2\,0)\overline{(2\,0)})$ z | $2(4(2\,0))2$ $z\rho$ | $2(4(2\,0))\overline{2}$ $z\rho$

$2(4(2\,0))(2\,0)$ x | $2(4(2\,0))\overline{(2\,0)}$ x | $2(3\,1(2\,0))1\,1$ $z\rho$ | $2(4\overline{(2\,0)}2\,0)$ x | $2(4\overline{(2\,0)}(2\,0))$ y | $2(4\overline{(2\,0)(2\,0)})$ z | $2(4\overline{(2\,0)})2$ $z\rho$

$2(4\overline{(2\,0)})\overline{2}$ $z\rho$ | $2(4\overline{(2\,0)})(2\,0)$ x | $2(4\overline{(2\,0)})\overline{(2\,0)}$ x | $2(3\,3(2\,0))$ $z\rho$ | $2(3\,3\overline{(2\,0)})$ $z\rho$ | $2(3\,2\,1(2\,0))$ $z\rho$ | $2(3\,2\,1\overline{(2\,0)})$ $z\rho$

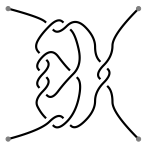
$2(3\,1\,0)2(2\,0)$ x | $2(3\,1\,0)2\overline{(2\,0)}$ x | $2(4\,0)1\,1(2\,0)$ x | $\overline{2(4\,0)}2(2\,0)$ x | $\overline{2(4\,0)}2\overline{(2\,0)}$ x | $\overline{2(4\,0)}2(2\,0)$ x | $\overline{2(4\,0)}2\overline{(2\,0)}$ x



$\overline{2(4\,0)}(2(2\,0))$ e | $2(3\,1\overline{(4\,0)})$ x | $2(3\,1(2\,2))$ $z\rho$ | $2(3\,1(2\,1))1$ $z\rho$ | $2(3\,1(2\,0)(2\,0))$ y | $2(3\,1(2\,0)\overline{(2\,0)})$ z | $2(3\,1(2\,0))2$ $z\rho$

Tangles 3350 – 3412 (with loops)

$2(3\,1(2\,0))\overline{2}$
$z\rho$



$2(3\,1(2\,0))(2\,0)$
x

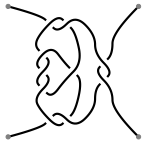
$2(3\,1(2\,0))\overline{(2\,0)}$
x

$2(4(2\,0))1\,1$
$z\rho$

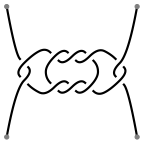
$2(3\,1\overline{(2\,0)})2$
$z\rho$

$2(3\,1\overline{(2\,0)})\overline{2}$
$z\rho$

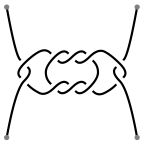
$2(3\,1\overline{(2\,0)})(2\,0)$
x



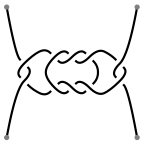
$2(3\,1\overline{(2\,0)})\overline{(2\,0)}$
x



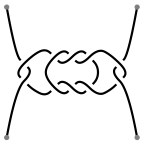
$2(3(3\,0)(2\,0))$
$z\rho$



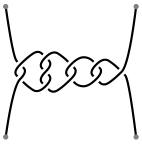
$2(3(3\,0)\overline{(2\,0)})$
$z\rho$



$2(3\overline{(3\,0)}(2\,0))$
y



$2(3\overline{(3\,0)(2\,0)})$
μz



$2(3(2(2\,1)))$
x

$2(3(2(2\,0)))1$
z

$2(3(2(2\,0)))\overline{1}$
z

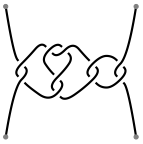
$2(3(2\overline{(2\,0)}))\overline{1}$
z

$2(2\,2\,2(2\,0))$
$z\rho$

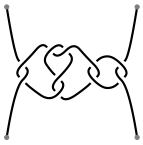
$2(2\,2\,2\overline{(2\,0)})$
$z\rho$

$2(2\,2\,1\,1(2\,0))$
$z\rho$

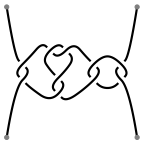
$2(2\,2\,1\,1\overline{(2\,0)})$
$z\rho$



$2(2\,2(2(2\,0)))$
x



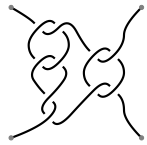
$2(2\,2\overline{(2(2\,0))})$
x



$2(2\,2(2\overline{(2\,0)}))$
x

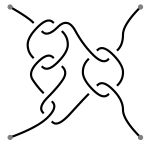
$2(2\,2)2(2\,0)$
x

$2(2\,2)2\overline{(2\,0)}$
x

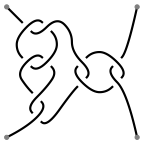


$2(2\,2)(2(2\,0)0)$
x

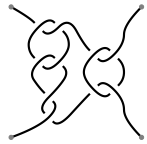
$2(2\,2)(2(2\,0))$
x



$2(2\,2)\overline{(2(2\,0)0)}$
x



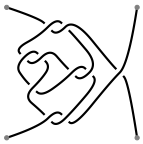
$2(2\,2)\overline{(2(2\,0))}$
x



$2(2\,2)(2\overline{(2\,0)}0)$
$z\rho$

$2(2\,2)(2\overline{(2\,0)})$
x

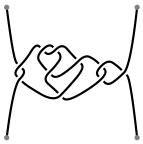
$2(2\,1\,2(2\,1))$
$z\rho$



$2(2\,1\,2(2\,0))1$
$z\rho$

$2(2\,1\,2(2\,0))\overline{1}$
$z\rho$

$2(2\,1\,2\overline{(2\,0)})\overline{1}$
$z\rho$



$2(2\,1\,1\,1(2\,1))$
$z\rho$

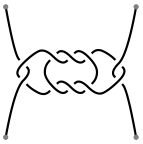
$2(2\,1\,1\,1(2\,0))1$
$z\rho$

$2(2\,1\,1\,1(2\,0))\overline{1}$
$z\rho$

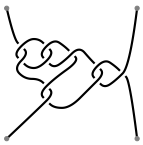
$2(2\,1(2\,1\,0)(2\,0))$
$z\rho$

$\overline{2}(2\,1(2\,1\,0)\overline{(2\,0)})$
$z\rho$

$2(2\,1(2\,1\,0)\overline{(2\,0)})$
$z\rho$



$2(\overline{3(3\,0)}(2\,0))$
$z\rho$



$2(2\,1)2(2\,1)$
x

$2(2\,1)2(2\,0)1$
z

$2(2\,1)2(2\,0)\overline{1}$
z

$2(2\,1)2\overline{(2\,0)1}$
z

$2(2\,1)\overline{(2\,1\,0)}(2\,0)$
e

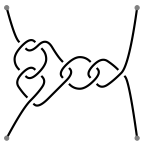
$2(2\,1)\overline{(2\,1\,0)(2\,0)}$
e

$2(2\,1)(2\,1\,0)(2\,0)$
e

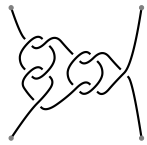
$2(2\,1)(2\,1\,0)\overline{(2\,0)}$
e

$2(2\,1)(2(2\,1)0)$
$z\rho$

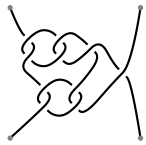
$\overline{2(2\,0)1}(2(2\,1)0)$
$z\rho$



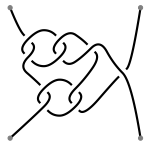
$2(2\,1)(2(2\,1))$
x



$2(2\,1)(2(2\,0)1)$
x



$2(2\,1)(2(2\,0)0)1$
z

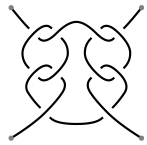


$2(2\,1)(2(2\,0)0)\overline{1}$
z

$2(2\,1)(2(2\,0))1$
z

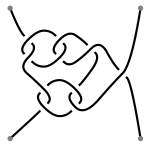
$2(2\,1)(2(2\,0))\overline{1}$
z

$2(2\,1)(2(2\,0)1\,0)$
x

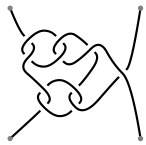


$2(2\,1)\overline{(2(2\,1)0)}$
$\overline{zx}$

$2(2\,1)\overline{(2(2\,0)1)}$
x



$2(2\,1)\overline{(2(2\,0)0)}1$
z



$2(2\,1)\overline{(2(2\,0)0)1}$
z

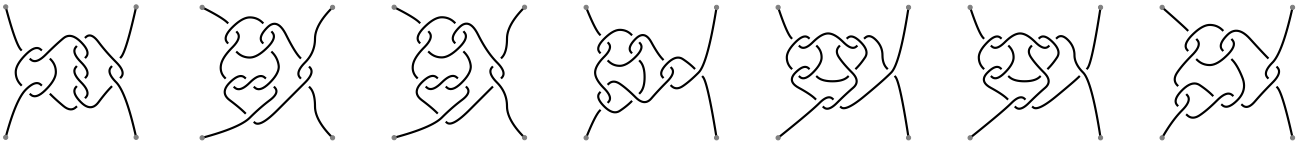
Tangles 3413 – 3475 (with loops)

$2(21)\overline{(2(20))}1$	$2(21)(2\overline{(20)}1)$	$2(21)(2\overline{(20)}0)1$	$2(21)(2\overline{(20)}0)\overline{1}$	$2(21)(2\overline{(20)})\overline{1}$	$2(20)4(20)$	$2(20)4\overline{(20)}$
z	$z\rho$	$z\rho$	$z\rho$	z	x	x

$2(20)31(20)$	$2(20)2(40)$	$2(20)2(310)$	$2(20)2\overline{(40)}$	$2(20)2(22)$	$2(20)2(21)1$	$2(20)2(20)2$
x	x	x	x	x	z	y

$2(20)2(20)\overline{2}$	$2(20)2(20)(20)$	$2(20)2(20)\overline{(20)}$	$2(20)11(20)11$	$2(20)2\overline{(20)}2$	$2(20)2\overline{(20)2}$	$2(20)2\overline{(20)}(20)$
y	e	e	y	y	y	e

$2(20)2\overline{(20)(20)}$	$2(20)2(2(20)0)$	$2(20)2\overline{(2(20)0)}$	$2(20)2(2\overline{(20)}0)$	$2(20)(4(20))$	$2(20)(4\overline{(20)})$	$2(20)(31(20))$
e	x	x	$z\rho$	x	x	x

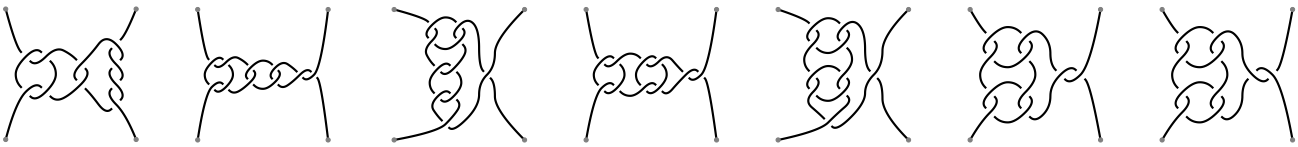


$2(20)\overline{(4(20))}$	$2(20)(31)(20)$	$2(20)(31)\overline{(20)}$	$2(20)\overline{(210)}(21)$	$2(20)\overline{(210)}(20)1$	$2(20)\overline{(210)}(20)\overline{1}$	$2(20)(220)(20)$
x	e	e	e	e	e	e

$2(20)(220)\overline{(20)}$	$2(20)\overline{(220)}(20)$	$2(20)(210)(21)$	$2(20)(210)(20)1$	$2(20)(210)(20)\overline{1}$	$2(20)(210)\overline{(21)}$	$2(20)(210)\overline{(20)1}$
e	e	e	e	e	e	e

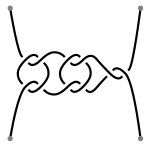
$\overline{2(20)}(30)1(20)$	$2(20)\overline{(31)}(20)$	$2(20)(20)2(20)$	$2(20)(20)2\overline{(20)}$	$\overline{2(20)}(20)11(20)$	$2(20)\overline{(20)}2(20)$	$2(20)\overline{(20)}2\overline{(20)}$
e	e	x	x	x	x	x

$2(20)\overline{(20)}(2(20))$	$2(20)\overline{(20)}(2\overline{(20)}0)$	$2(20)\overline{(20)}(2\overline{(20)})$	$2(20)(2(40))$	$2(20)(2(310))$	$2(20)\overline{(2(40))}$	$2(20)(2\overline{(40)}0)$
e	y	e	x	x	x	e

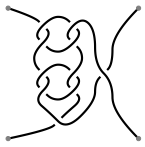


$2(20)(2\overline{(40)})$	$2(20)(2(22))$	$2(20)(2(21))1$	$2(20)(2(20)2)$	$2(20)(2(20)1)1$	$2(20)(2(20)0)2$	$2(20)(2(20)0)\overline{2}$
x	x	z	$z\rho$	$z\rho$	$z\rho$	$z\rho$

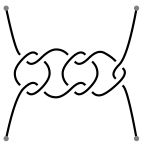
Tangles 3476 – 3538 (with loops)



$2(20)(2(20)\overline{2})$
$z\rho$

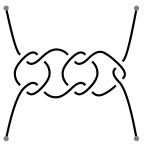


$2(20)(2(20)\overline{1})\overline{1}$
$z\rho$



$2(20)(2(20)(20))$
x

$2(20)(2(20)\overline{(20)}0)$
e



$2(20)(2(20)\overline{(20)})$
x

$2(20)(2(20))2$
y

$2(20)(2(20))\overline{2}$
y

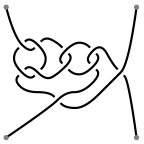
$2(20)(2(20))(20)$
e

$2(20)(2(20))\overline{(20)}$
e

$2(20)(2(20)110)$
x

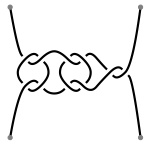
$2(20)(2(20)11)$
x

$2(20)(2(20)10)1$
z



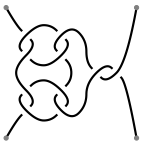
$\overline{2(20)}(2(20))11$
y

$2(20)(\overline{2(20)}20)$
x

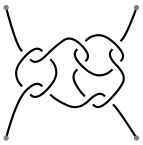


$2(20)(\overline{2(20)}2)$
x

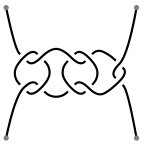
$2(20)(\overline{2(20)}1)1$
z



$2(20)\overline{(2(20)0)}2$
y

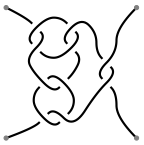


$2(20)(\overline{2(20)}(20)0)$
e



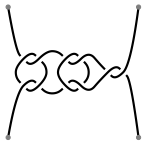
$2(20)(\overline{2(20)}(20))$
x

$2(20)\overline{(2(20))}2$
y



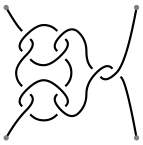
$2(20)\overline{(2(20))}(20)$
e

$2(20)(2\overline{(20)}20)$
x

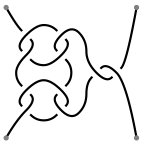


$2(20)(2\overline{(20)}2)$
$z\rho$

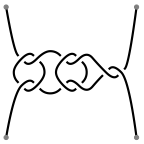
$2(20)(2\overline{(20)}1)1$
$z\rho$



$2(20)(2\overline{(20)}0)2$
$z\rho$



$2(20)(2\overline{(20)}0)\overline{2}$
$z\rho$

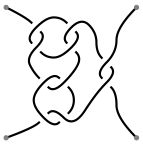


$2(20)(2\overline{(20)2})$
$z\rho$

$2(20)(2\overline{(20)1})\overline{1}$
$z\rho$

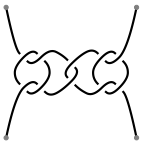
$2(20)(2\overline{(20)})2$
y

$2(20)(2\overline{(20)})\overline{2}$
y

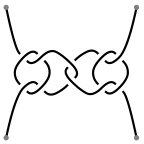


$2(20)(2\overline{(20)})(20)$
e

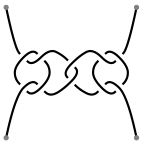
$2(20)(2\overline{(20)})\overline{(20)}$
e



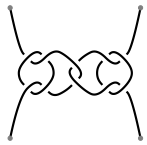
$2(20)(2(2(20)0))$
$z\rho$



$2(20)(\overline{2}(2(20)0))$
$z\rho$



$2(20)(2\overline{(2(20)0)})$
x

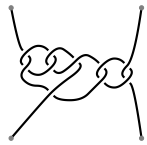


$2(20)(\overline{2}(\overline{2}(20)0))$
x

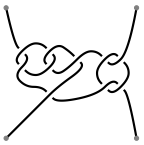
$2(22)11(20)$
x

$2(21)11(21)$
x

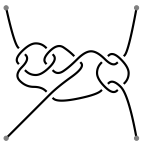
$2(21)11(20)1$
z



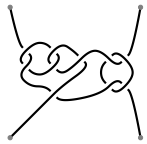
$2(21)1(2(20))$
x



$2(21)1(2(20)0)$
x



$2(21)1\overline{(2(20)0)}$
x



$2(21)1(\overline{2}(20)0)$
$z\rho$

$2(20)13(20)$
x

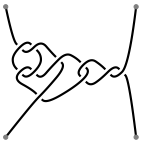
$2(20)13\overline{(20)}$
x

$2(20)121(20)$
x

$2(20)11(40)$
x

$2(20)11(310)$
x

$2(20)11\overline{(40)}$
x



$2(20)11(22)$
x

$2(20)11(21)1$
z

$2(20)11(20)2$
y

$2(20)11(20)\overline{2}$
y

$2(20)11(20)(20)$
e

$2(20)11(20)\overline{(20)}$
e

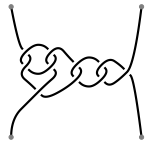
$2(20)2(20)11$
y

$2(20)11\overline{(2(20)0)}$
x

$2(20)11(2\overline{(20)}0)$
$z\rho$

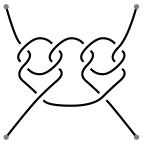
$2(20)1(30)(20)$
e

$2(20)1(30)\overline{(20)}$
e



$2(20)1(2(21))$
x

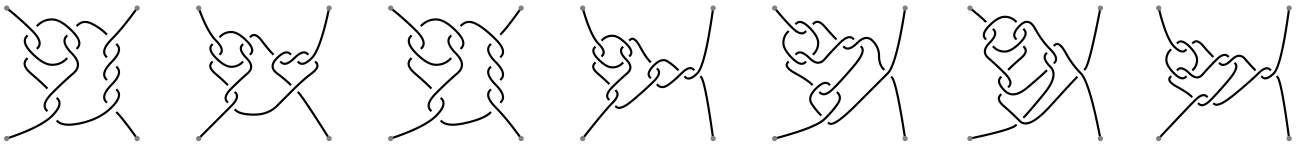
$2(20)1(2(20))1$
z



$2(20)1(2(20)10)$
$z\rho$

Tangles 3539 – 3601 (with loops)

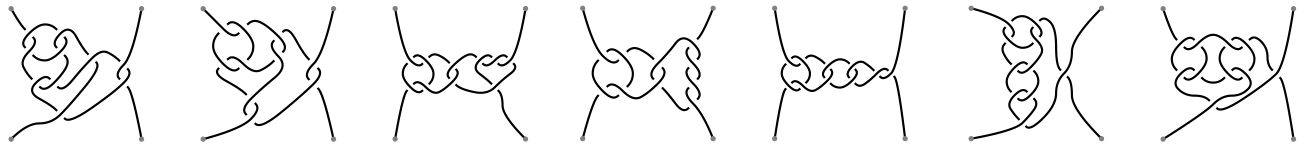
$2(20)1(\overline{2(20)}1)$ x | $2(20)1\overline{(2(20)0)}1$ z | $2(20)1(\overline{2}(20)1)$ $z\rho$ | $2(20)1(\overline{2}(20)0)1$ $z\rho$ | $\overline{2(20)}4(\overline{2(20)})$ x | $\overline{2(20)}31(20)$ x | $2(20)\overline{4(20)}$ x



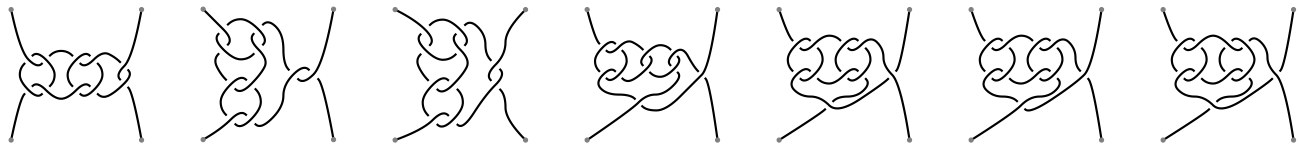
$\overline{2(20)}2(40)$ x | $\overline{2(20)}2(310)$ x | $\overline{2(20)}2\overline{(40)}$ x | $\overline{2(20)}2(22)$ x | $\overline{2(20)}2(21)1$ z | $2(20)\overline{2(20)11}$ y | $\overline{2(20)}2(20)2$ y

$\overline{2(20)}2(20)\overline{2}$ y | $\overline{2(20)}2(20)(20)$ e | $\overline{2(20)}2(20)\overline{(20)}$ e | $\overline{2(20)}2\overline{(2(20)0)}$ x | $\overline{2(20)}2(2\overline{(20)}0)$ $z\rho$ | $\overline{2(20)}(4\overline{(20)})$ x | $\overline{2(20)}(31(20))$ x

$\overline{2(20)}(31)(20)$ e | $\overline{2(20)}(220)(20)$ e | $\overline{2(20)}(210)(21)$ e | $\overline{2(20)}(210)(20)1$ e | $2(20)(30)1(20)$ e | $\overline{2(20)}(20)2(20)$ x | $\overline{2(20)}(20)2\overline{(20)}$ x

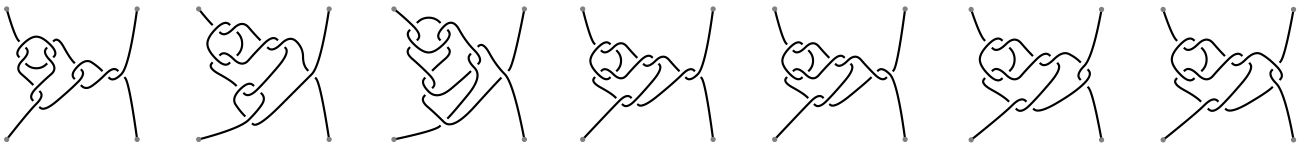


$2(20)(20)11(20)$ x | $\overline{2(20)(20)}2(20)$ x | $\overline{2(20)}(2(310))$ x | $\overline{2(20)}(2\overline{(40)})$ x | $\overline{2(20)}(2(22))$ x | $\overline{2(20)}(2(21))1$ z | $2(20)\overline{(2(20)0)}11$ y



$\overline{2(20)}(2(20)(20))$ x | $\overline{2(20)}(2(20))2$ y | $\overline{2(20)}(2(20))(20)$ e | $2(20)(2(20))11$ y | $2(20)(2(20)0)\overline{11}$ $z\rho$ | $2(20)(2(20)0)11$ $z\rho$ | $2(20)(\overline{2}(20)0)\overline{11}$ $z\rho$

$2(20)(\overline{2}(20)0)11$ $z\rho$ | $2\overline{(20)}4(20)$ x | $2\overline{(20)}4\overline{(20)}$ x | $2\overline{(20)}31(20)$ x | $2\overline{(20)}2(40)$ x | $2\overline{(20)}2(310)$ x | $2\overline{(20)}2\overline{(40)}$ x



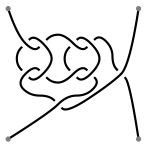
$2\overline{(20)}2(22)$ x | $2\overline{(20)}2(21)1$ z | $\overline{2}(20)\overline{2(20)11}$ y | $2\overline{(20)}2(20)2$ y | $2\overline{(20)}2(20)\overline{2}$ y | $2\overline{(20)}2(20)(20)$ e | $2\overline{(20)}2(20)\overline{(20)}$ e

$2\overline{(20)}2\overline{(20)}2$ y | $2\overline{(20)}2\overline{(20)}\overline{2}$ y | $2\overline{(20)}2\overline{(20)}(20)$ e | $2\overline{(20)}2\overline{(20)(20)}$ e | $2\overline{(20)}2\overline{(2(20)0)}$ x | $2\overline{(20)}2(2\overline{(20)}0)$ $z\rho$ | $2\overline{(20)}(2\overline{(20)}2)$ $z\rho$

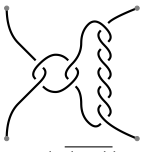
Tangles 3602 – 3664 (with loops)

$2(\overline{2\,0})(2(\overline{2\,0})1)1$
$z\rho$

$2(\overline{2\,0})(2(\overline{2\,0})0)2$
$z\rho$

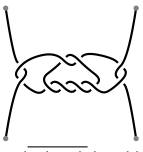


$\overline{2}(2\,0)(\overline{2}(2\,0)0)1\,1$
$z\rho$



$2(2(\overline{6\,0}))$
x

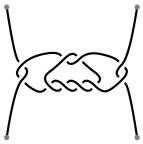
$\overline{2}(3\,1(2\,0)\overline{(2\,0)})$
y



$2(\overline{2(4\,0)}(2\,0))$
y

$2(2(\overline{4\,0})2\,0)$
x

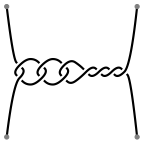
$\overline{2}(2(\overline{4\,0})2\,0)$
x



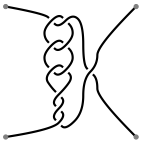
$2(2(\overline{4\,0})(2\,0))$
y

$2(2(\overline{4\,0}))2$
y

$2(2(\overline{4\,0}))(2\,0)$
e



$2(2(2\,4))$
$z\rho$



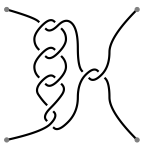
$2(2(2\,3))1$
$z\rho$

$2(2(2\,2\,1\,1\,0))$
x

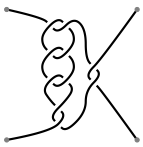
$2(2(2\,2)(2\,0))$
$z\rho$

$\overline{2}(2(2\,2)\overline{(2\,0)})$
$z\rho$

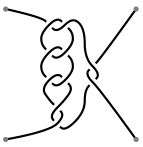
$2(2(2\,2)\overline{(2\,0)})$
$z\rho$



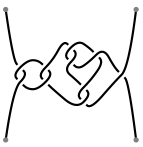
$2(2(2\,2))2$
$z\rho$



$2(2(2\,2))(2\,0)$
x



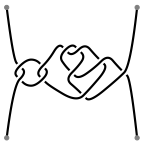
$2(2(2\,2))\overline{(2\,0)}$
x



$2(2(2\,1\,2\,1))$
x

$2(2(2\,1\,2\,0))1$
z

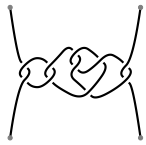
$2(2(2\,1\,2\,0))\overline{1}$
z



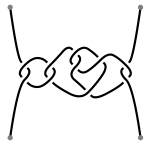
$2(2(2\,1\,1\,1\,1))$
x

$2(2(2\,1\,1\,1\,0))1$
z

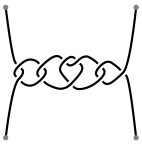
$2(2\overline{(2\,1\,2\,0)})1$
z



$2(2(2\,1\,1(2\,0)))$
x



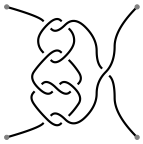
$2(2(2\,1\,1\overline{(2\,0)}))$
x



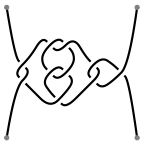
$2(2(2\,1(2\,1)))$
x

$2(2(2\,1(2\,0)))1$
z

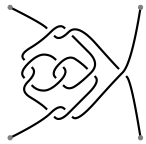
$2(2(2\,1(2\,0)))\overline{1}$
z



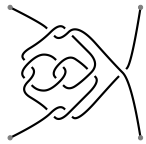
$2(2\overline{(3(2\,0))})1$
z



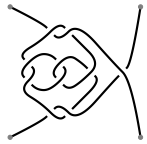
$2(2(2\,1)(2\,1))$
$z\rho$



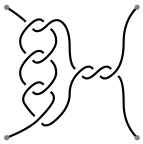
$2(2(2\,1)(2\,0))1$
$z\rho$



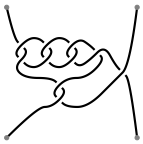
$2(2(2\,1)(2\,0))\overline{1}$
$z\rho$



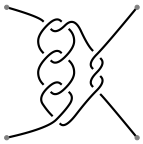
$2(2(2\,1)\overline{(2\,0)})\overline{1}$
$z\rho$



$2(2(2\,1))3$
$z\rho$



$2(2(2\,1))2\,1$
$z\rho$



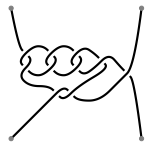
$2(2(2\,1))(3\,0)$
x

$2(2(2\,1))\overline{(2\,1\,0)}$
x

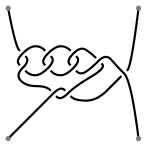
$2(2(2\,1))(2\,1\,0)$
x

$2(2(2\,1))\overline{(3\,0)}$
x

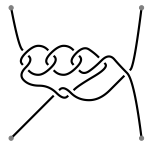
$2(2(2\,1))(2\,1)$
x



$2(2(2\,1))(2\,0)1$
z

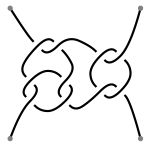


$2(2(2\,1))(2\,0)\overline{1}$
z



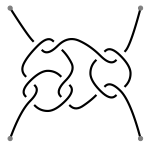
$2(2(2\,1))\overline{(2\,0)1}$
z

$2(2(2\,0)0)2\overline{(2\,0)}$
x



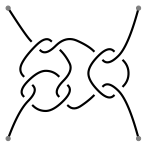
$2(2(2\,0)0)(2(2\,0)0)$
e

$2(2(2\,0)0)(2(2\,0))$
e



$2(2(2\,0)0)\overline{(2(2\,0)0)}$
e

$2(2(2\,0)0)\overline{(2(2\,0))}$
e

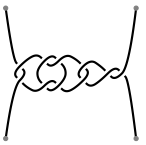


$2(2(2\,0)0)(2\overline{(2\,0)0})$
y

$2(2(2\,0)0)(2\overline{(2\,0)})$
e

$\overline{2}(2(2\,0)0)2\overline{(2\,0)}$
x

$2(2(2\,0)\overline{(4\,0)})$
x



$2(2(2\,0)(2\,2))$
$z\rho$

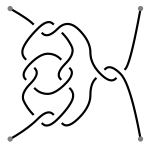
$2(2(2\,0)(2\,1))1$
$z\rho$

$2(2(2\,0)(2\,0)2\,0)$
x

$2(2(2\,0)(2\,0)(2\,0))$
y

$2(2(2\,0)(2\,0)\overline{(2\,0)})$
z

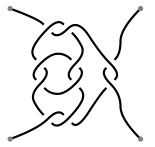
$2(2(2\,0)(2\,0))2$
$z\rho$



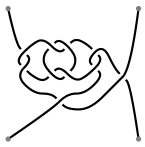
$2(2(2\,0)(2\,0))\overline{2}$
$z\rho$

$2(2(2\,0)(2\,0))(2\,0)$
x

Tangles 3665 – 3727 (with loops)



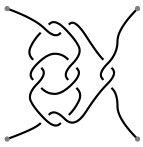
$2(2(20)(20))\overline{(20)}$
x



$2(\overline{2(20)}(20))11$
$z\rho$

$2(\overline{2(20)}(20)110)$
x

$\overline{2}(2(20)\overline{(20)})2$
$z\rho$



$\overline{2}(2(20)\overline{(20)})(20)$
x

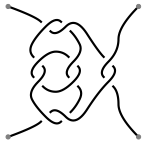
$2(2(20)\overline{(20)}20)$
x

$2(2(20)\overline{(20)}(20))$
y

$2(2(20)\overline{(20)(20)})$
z

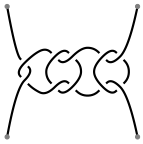
$2(2(20)\overline{(20)})2$
$z\rho$

$2(2(20)\overline{(20)})\overline{2}$
$z\rho$

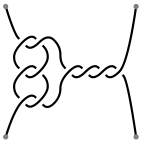


$2(2(20)\overline{(20)})(20)$
x

$2(2(20)\overline{(20)})\overline{(20)}$
x

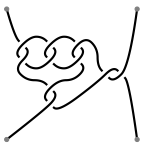


$2(2(20)(2\overline{(20)}0))$
x



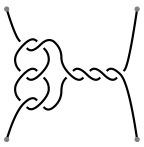
$2(2(20))4$
$z\rho$

$2(2(20))31$
$z\rho$

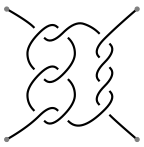


$2(2(20))22$
$z\rho$

$2(2(20))211$
$z\rho$



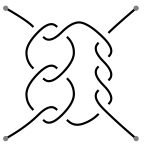
$2(2(20))\overline{4}$
$z\rho$



$2(2(20))(40)$
x

$2(2(20))\overline{(310)}$
x

$2(2(20))(310)$
x



$2(2(20))\overline{(40)}$
x

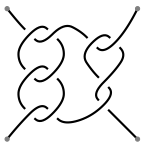
$2(2(20))(31)$
x

$2(2(20))(30)1$
z

$2(2(20))(30)\overline{1}$
z

$2(2(20))\overline{(211)}$
x

$2(2(20))\overline{(210)1}$
z

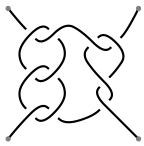


$2(2(20))(220)$
x

$2(2(20))\overline{(2110)}$
x

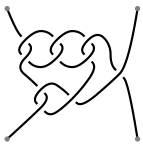
$2(2(20))(22)$
x

$2(2(20))(2110)$
x



$2(2(20))\overline{(220)}$
x

$2(2(20))(211)$
x



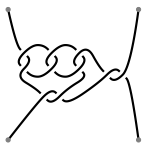
$2(2(20))(210)1$
z

$2(2(20))\overline{(31)}$
x

$2(2(20))\overline{(30)}1$
z

$2(2(20))\overline{(30)1}$
z

$2(2(20))(21)1$
z

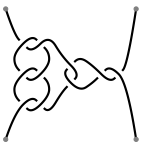


$2(2(20))(20)2$
y

$2(2(20))(20)\overline{2}$
y

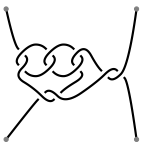
$2(2(20))(20)(20)$
e

$2(2(20))(20)\overline{(20)}$
e

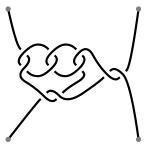


$2(2(20))\overline{(22)}$
x

$2(2(20))\overline{(21)1}$
z

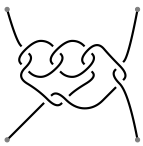


$2(2(20))\overline{(20)}2$
y

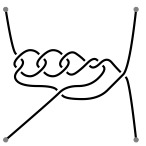


$2(2(20))\overline{(20)2}$
y

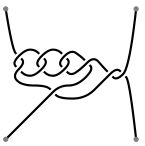
$2(2(20))\overline{(20)}(20)$
e



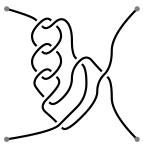
$2(2(20))\overline{(20)(20)}$
e



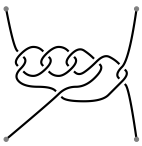
$2(2(22))11$
$z\rho$



$2(2(21))12$
$z\rho$

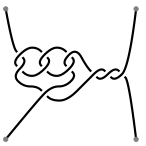


$2(2(21))111$
$z\rho$



$2(2(21))1(20)$
x

$2(2(21)1(20))$
$z\rho$



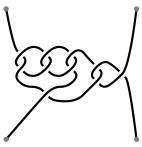
$2(2(20))13$
$z\rho$

$2(2(20))121$
$z\rho$

$2(2(20))112$
$z\rho$

$2(2(20))1111$
$z\rho$

$2(2(20))1(30)$
x



$2(2(20))1(21)$
x

$2(2(20))1(210)$
x

$2(2(20))1(20)1$
z

$2(2(20)1(21))$
$z\rho$

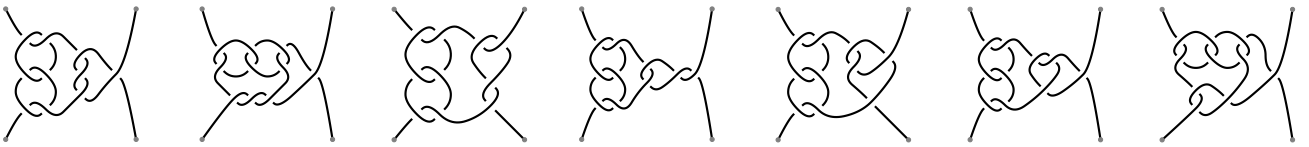
$2(2(20)1(20))1$
$z\rho$

Tangles 3728 – 3790 (with loops)

$2(\overline{2(2\,1)}(2\,0))1$ $z\rho$ | $2(2(2\,0))\overline{2\,1\,1}$ $z\rho$ | $\overline{2(2(2\,0))}2\,2$ $z\rho$ | $2(2(2\,0))\overline{3\,1}$ $z\rho$ | $2(2(2\,0))\overline{(2\,0)1\,1}$ y | $2(2(2\,0))(2\,0)1\,1$ y | $2\overline{(2(2\,0)0)}2\overline{(2\,0)}$ x

$2\overline{(2(2\,0)0)}(2(2\,0))$ e | $2(\overline{2(2\,0)}(2\,2))$ $z\rho$ | $2(\overline{2(2\,0)}(2\,1))1$ $z\rho$ | $2(\overline{2(2\,0)}(2\,0)2\,0)$ x | $2(\overline{2(2\,0)}(2\,0)(2\,0))$ y | $2(\overline{2(2\,0)}(2\,0))2$ $z\rho$ | $2(\overline{2(2\,0)}(2\,0))(2\,0)$ x

$2(2(2\,0)(2\,0))1\,1$ $z\rho$ | $2(2(2\,0)(2\,0)1\,1\,0)$ x | $2(\overline{2(2\,0)(2\,0)}2\,0)$ x | $2\overline{(2(2\,0))}3\,1$ $z\rho$ | $2\overline{(2(2\,0))}2\,2$ $z\rho$ | $2\overline{(2(2\,0))}2\,1\,1$ $z\rho$ | $2\overline{(2(2\,0))}(3\,1\,0)$ x

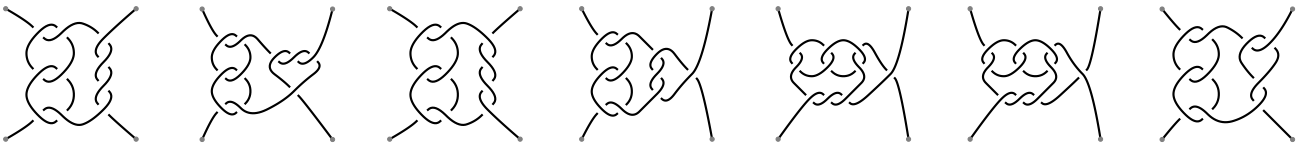


$2\overline{(2(2\,0))}(3\,1)$ x | $2\overline{(2(2\,0))}(3\,0)1$ z | $2\overline{(2(2\,0))}(2\,2\,0)$ x | $2\overline{(2(2\,0))}(2\,2)$ x | $2\overline{(2(2\,0))}(2\,1\,1\,0)$ x | $2\overline{(2(2\,0))}(2\,1\,1)$ x | $2\overline{(2(2\,0))}(2\,1\,0)1$ z

$2\overline{(2(2\,0))}(2\,1)1$ z | $2\overline{(2(2\,0))}(2\,0)2$ y | $2\overline{(2(2\,0))}(2\,0)(2\,0)$ e | $\overline{2}(2(2\,0))(2\,0)1\,1$ y | $2(2\overline{(2\,0)}0)2(2\,0)$ x | $2(2\overline{(2\,0)}0)2\overline{(2\,0)}$ x | $2(2\overline{(2\,0)}0)(2(2\,0)0)$ x

$2(2\overline{(2\,0)}0)(2(2\,0))$ x | $2(2\overline{(2\,0)}0)(2\overline{(2\,0)}0)$ $z\rho$ | $2(2\overline{(2\,0)}0)(2\overline{(2\,0)})$ x | $2(2\overline{(2\,0)}0)1\,1(2\,0)$ x | $\overline{2}(\overline{2}(2\,0)0)2(2\,0)$ x | $\overline{2}(\overline{2}(2\,0)0)2\overline{(2\,0)}$ μx | $\overline{2}(\overline{2}(2\,0)0)(2(2\,0)0)$ x

$\overline{2}(\overline{2}(2\,0)0)(2(2\,0))$ x | $2(2\overline{(2\,0)}(2\overline{(2\,0)}0))$ $z\rho$ | $2(2\overline{(2\,0)})4$ $z\rho$ | $2(2\overline{(2\,0)})3\,1$ $z\rho$ | $2(2\overline{(2\,0)})2\,2$ $z\rho$ | $2(2\overline{(2\,0)})2\,1\,1$ $z\rho$ | $2(2\overline{(2\,0)})\overline{4}$ $z\rho$

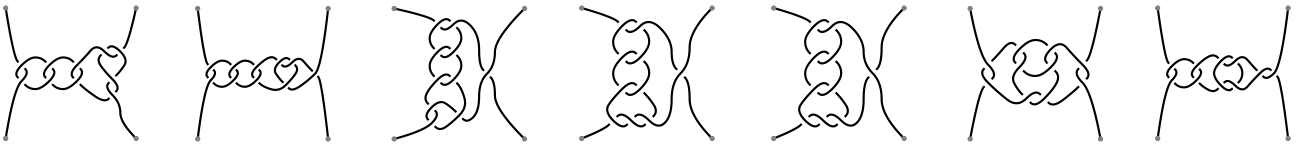


$2(2\overline{(2\,0)})(4\,0)$ x | $2(2\overline{(2\,0)})(3\,1\,0)$ x | $2(2\overline{(2\,0)})\overline{(4\,0)}$ x | $2(2\overline{(2\,0)})(3\,1)$ x | $2(2\overline{(2\,0)})(3\,0)1$ z | $2(2\overline{(2\,0)})(3\,0)\overline{1}$ z | $2(2\overline{(2\,0)})(2\,2\,0)$ x

$2(2\overline{(2\,0)})(2\,2)$ x | $2(2\overline{(2\,0)})(2\,1\,1\,0)$ x | $2(2\overline{(2\,0)})(2\,1\,1)$ x | $2(2\overline{(2\,0)})(2\,1\,0)1$ z | $2(2\overline{(2\,0)})\overline{(3\,0)}1$ z | $2(2\overline{(2\,0)})(2\,1)1$ z | $2(2\overline{(2\,0)})(2\,0)2$ y

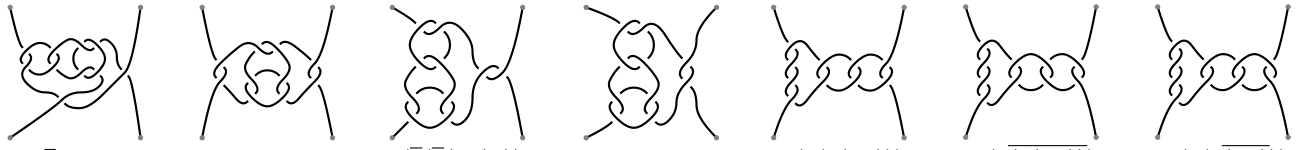
Tangles 3791 – 3853 (with loops)

$2(2(\overline{2\,0}))(2\,0)\overline{2}$ y | $2(2(\overline{2\,0}))(2\,0)(2\,0)$ e | $2(2(\overline{2\,0}))(2\,0)\overline{(2\,0)}$ e | $\overline{2}(\overline{2}(2\,0))(2\,0)1\,1$ y | $2(2(\overline{2\,0}))\overline{(2\,0)}2$ y | $2(2(\overline{2\,0}))\overline{(2\,0)}(2\,0)$ e | $2(2(2\,1\,1\,0)))$ x



$2(2(2(\overline{2\,2\,0})))$ x | $2(2(2(2\,1\,1)))$ x | $2(2(2(2\,1\,0)))1$ z | $2(2(2(\overline{3\,0})))1$ z | $2(2(2(\overline{3\,0})))\overline{1}$ z | $\overline{2}(2(2\,0)(2\,0)\overline{(2\,0)})$ y | $2(2(2(\overline{2\,0})2))$ $z\rho$

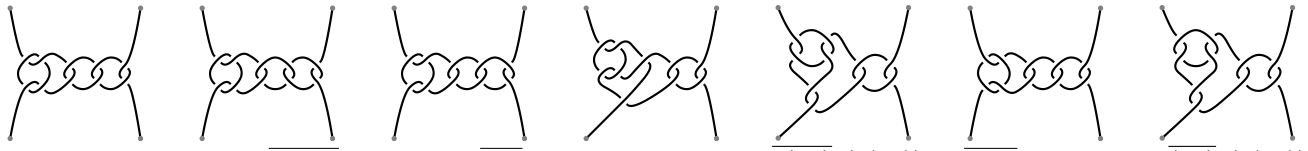
$2(2(2(\overline{2\,0})1))1$ $z\rho$ | $2(2(2(\overline{2\,0})0)(2\,0))$ $z\rho$ | $2(2(2(\overline{2\,0})0)\overline{(2\,0)})$ $z\rho$ | $2(2(2(\overline{2\,0})0))2$ $z\rho$ | $2(2(2(\overline{2\,0})0))\overline{2}$ $z\rho$ | $2(2(2(\overline{2\,0})0))(2\,0)$ x | $2(2(2(\overline{2\,0})0))\overline{(2\,0)}$ x



$2(2(\overline{2}(2\,0)0))1\,1$ $z\rho$ | $2(\overline{2}(\overline{2}(2\,0)0)(2\,0))$ $z\rho$ | $2(\overline{2}(\overline{2}(2\,0)0))2$ $z\rho$ | $2(\overline{2}(\overline{2}(2\,0)0))(2\,0)$ x | $4(2(2(2\,0)))$ x | $4(2\overline{(2(2\,0))})$ x | $4(2(2\overline{(2\,0)}))$ x

$3\,1(2(2(2\,0)))$ x | $2(4(2(2\,0)))$ x | $2(4\overline{(2(2\,0))})$ x | $2(4(2\overline{(2\,0)}))$ x | $2(3\,1(2(2\,0)))$ x | $2(3\,1(2\overline{(2\,0)}))$ x | $2(2\,0)2(2(2\,0))$ x

$2(2\,0)2\overline{(2(2\,0))}$ x | $2(2\,0)2(2\overline{(2\,0)})$ x | $2(2\,0)(2(2\,0)0)(2\,0)$ x | $2(2\,0)(2(2\,0)0)\overline{(2\,0)}$ x | $2(2\,0)\overline{(2(2\,0)0)}(2\,0)$ e | $2(2\,0)(2\overline{(2\,0)}0)(2\,0)$ x | $2(2\,0)(2\overline{(2\,0)}0)\overline{(2\,0)}$ x



$2(2\,0)(2(2(2\,0)))$ x | $2(2\,0)(2\overline{(2(2\,0))})$ x | $2(2\,0)(2(2\overline{(2\,0)}))$ x | $2(2\,0)1\,1(2(2\,0))$ x | $\overline{2(2\,0)}2(2(2\,0))$ x | $\overline{2(2\,0)}(2(2(2\,0)))$ x | $2\overline{(2\,0)}2(2(2\,0))$ x

$2\overline{(2\,0)}2\overline{(2(2\,0))}$ x | $2\overline{(2\,0)}2(2\overline{(2\,0)})$ x | $2\overline{(2\,0)}(2(\overline{2\,0})0)(2\,0)$ x | $2(2(2\,0)2(2\,0))$ $z\rho$ | $\overline{2}(2(2\,0)2\overline{(2\,0)})$ $z\rho$ | $2(2(2\,0)2\overline{(2\,0)})$ $z\rho$ | $2(2(2\,0)\overline{(2(2\,0))})$ x

$2(2(2\,0))2(2\,0)$ x | $2(2(2\,0))2\overline{(2\,0)}$ x | $2(2(2\,0))(2(2\,0)0)$ x | $2(2(2\,0))(2(2\,0))$ x | $2(2(2\,0))\overline{(2(2\,0)0)}$ x | $2(2(2\,0))\overline{(2(2\,0))}$ x | $2(2(2\,0))(2\overline{(2\,0)}0)$ $z\rho$

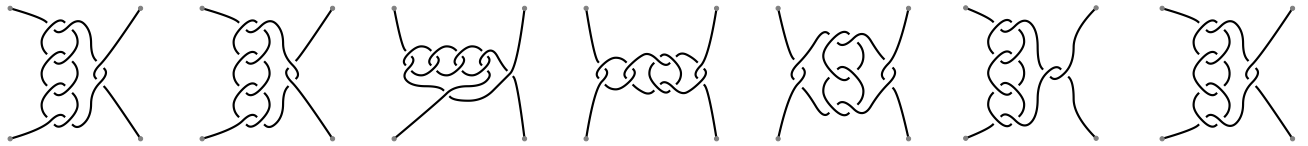
Tangles 3854 – 3899 (with loops)

$2(2(20))(2\overline{(20)})$ x | $2(2(20))11(20)$ x | $2(2(20)11(20))$ $z\rho$ | $\overline{2(2(20))}2(20)$ x | $2(\overline{2(20)}2(20))$ $z\rho$ | $2(\overline{2(20)}2\overline{(20)})$ $z\rho$ | $2\overline{(2(20))}2(20)$ x

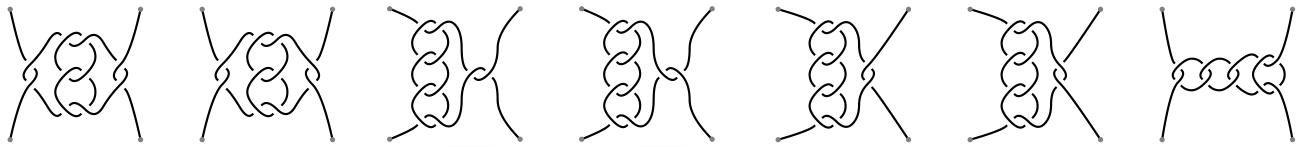
$2\overline{(2(20))}2\overline{(20)}$ μx | $2\overline{(2(20))}(2(20)0)$ x | $2\overline{(2(20))}(2(20))$ x | $2(2\overline{(20)}2(20))$ $z\rho$ | $2(2\overline{(20)}2\overline{(20)})$ $z\rho$ | $2(2\overline{(20)})2(20)$ x | $2(2\overline{(20)})2\overline{(20)}$ x

$2(2\overline{(20)})(2(20)0)$ x | $2(2\overline{(20)})(2(20))$ x | $2(2\overline{(20)})(2\overline{(20)}0)$ $z\rho$ | $2(2\overline{(20)})(2\overline{(20)})$ x | $2(2(2\overline{(40)}))$ x | $2(2(2(22)))$ $z\rho$ | $2(2(2(21)))1$ $z\rho$

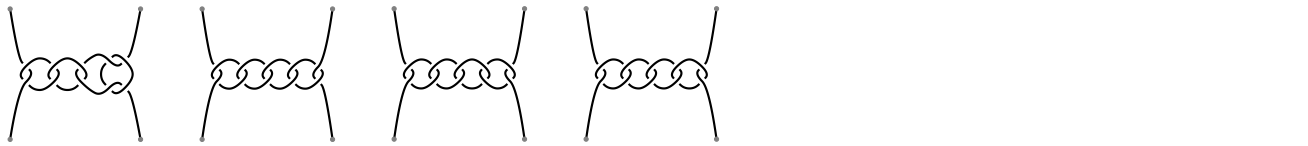
$2(2(2(20)(20)))$ x | $2(2(2(20)\overline{(20)}))$ x | $2(2(2(20))(20))$ $z\rho$ | $\overline{2}(2(2(20))\overline{(20)})$ $z\rho$ | $2(2(2(20))\overline{(20)})$ $z\rho$ | $2(2(2(20)))2$ $z\rho$ | $2(2(2(20)))\overline{2}$ $z\rho$



$2(2(2(20)))(20)$ x | $2(2(2(20)))\overline{(20)}$ x | $2(2(2(20)))11$ $z\rho$ | $2(2\overline{(2(20)}(20)))$ x | $2(2\overline{(2(20))}(20))$ $z\rho$ | $2(2\overline{(2(20)))}2$ $z\rho$ | $2(2\overline{(2(20)))}(20)$ x



$2(2(\overline{2(20)})(20))$ $z\rho$ | $2(2(\overline{2(20)})\overline{(20)})$ $z\rho$ | $2(2(\overline{2(20)}))2$ $z\rho$ | $2(2(\overline{2(20)}))\overline{2}$ $z\rho$ | $2(2(\overline{2(20)}))(20)$ x | $2(2(\overline{2(20)}))\overline{(20)}$ x | $2(2(2(\overline{2(20)})0)))$ $z\rho$



$2(2(\overline{2}(\overline{2}(20)0)))$ $z\rho$ | $2(2(2(2(20))))$ $z\rho$ | $2(2(2\overline{(2(20))}))$ $z\rho$ | $2(2(2(2\overline{(20)})))$ $z\rho$