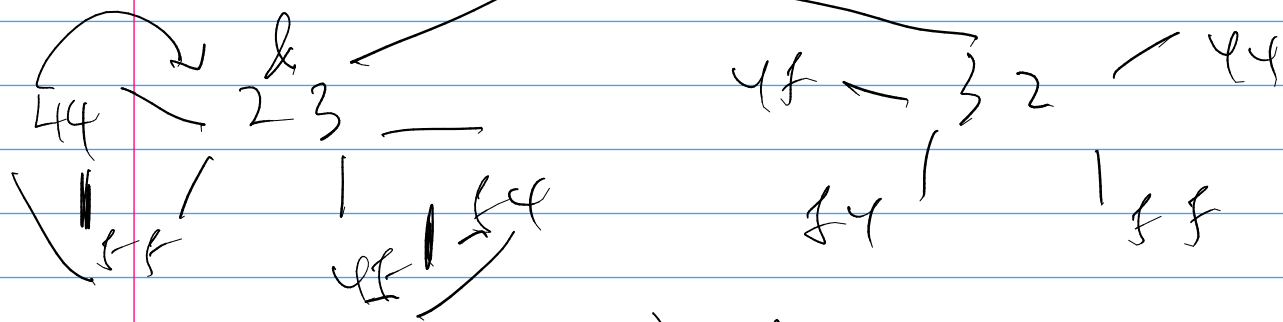


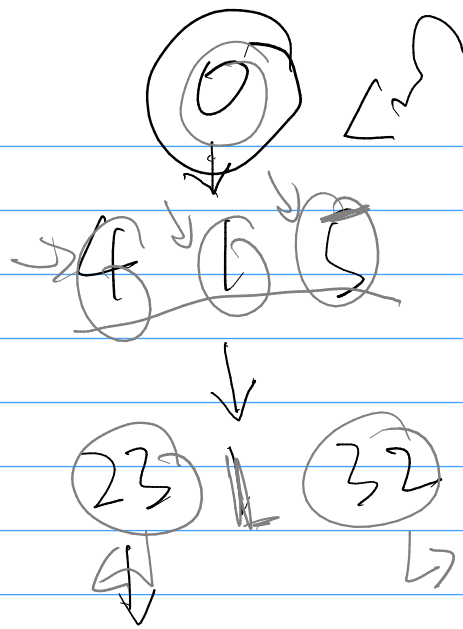
0 4 1 5 6



$(aa|bb) \& (ab|ba)$ $(ab|ba) \& (aa|bb)$
 $\parallel (a|baa, a|bbb, b|aaa, b|bbb)$
 $(\underline{aaab, aaba, bbab, bbaa})$

$aaab, aaba, bbab, bbaa$

$aaab, aaba, bbab, bbaa$



① Key (one digit)

② & group

③ ↓ group

④ "a" or "b"

44 | 55 45 | 54

⑦

↓
aa

$$\textcircled{1} \quad 8 : 42 \mid 428$$

$$\textcircled{2} \quad 42 \mid 42(42 \mid \underline{8})$$

$$\textcircled{3} \quad 42 \mid 42(42 \mid (42 \mid \underline{8}))$$

$$\hookrightarrow 42 \mid 4242 \mid 424242 \mid \dots$$

$$42^N, N \geq 1$$

$$11 : 4231 \mid 42 \underbrace{11} \mid 31$$

$$4231 \mid 42(\underline{4231 \mid 421131})31$$

$$4231 \mid 42423131 \mid \mid 4242 \underbrace{113131}$$

$$4231 \mid 42423131 \mid 4242(4231 \mid 421131)3131$$

$$424242313131 \mid 42^4 \dots 31^4$$

$$42^N 31^N, N \geq 1$$

$$5 : 8 \mid 11 \rightarrow$$

$$\hookrightarrow \underbrace{42^N 8 \ 42^N 31^N}, N \geq 1, \frac{N \geq 1}{2}$$

$$1424 \quad 2425 \quad 1314 \quad \begin{array}{r} 3 \\ 4 \end{array}$$

$$42 \quad 42 \quad 42 \quad 3131 \rightarrow 5 \text{ parts}$$

$$\sim 42 \quad 42 \quad 42 \quad 42 \quad 31 \rightarrow 5 \text{ parts}$$

$$42 \quad 31$$

$$42 \quad 42 \quad 42 \quad 42 \quad 313131 \rightarrow 7$$

$$8$$

$$42 \quad 42^4 \quad 3(313131) \rightarrow 9$$

For 31 behind

$$3 \rightarrow 1$$

$$4 \rightarrow 1$$

$$5 \rightarrow 1, 2$$

$$6 \rightarrow 1, 2$$

$$7 \rightarrow 1, 2, 3$$

$$8 \rightarrow 1, 2, 3$$

$$9 \rightarrow 1, 2, 3, 4$$