

$$\begin{pmatrix} 1 & 1 \end{pmatrix}_{10} \Rightarrow \begin{pmatrix} 10 & 1 & 1 \end{pmatrix}_2$$

$$\begin{array}{r} 2 \overline{111} \\ 2 \overline{5} \\ 2 \overline{2} \\ 2 \overline{1} \\ 0 \end{array} \quad \begin{array}{c} 1 \\ 1 \\ 0 \\ 1 \end{array} \quad \uparrow$$

$$(29)_{10}$$



$$(1101)_2$$

2	29	1	↑
2	14	0	
2	7	1	
2	3	1	
2	1	1	
		0	

$$\left(\begin{array}{ccccc} 1 & 0 & 1 & 0 & 1 \\ 4 & 3 & 2 & 1 & 0 \end{array} \right) \Rightarrow (21)_{10}$$

$$\begin{array}{r} \underline{1x^2^4} + \underline{0x^2^3} + \underline{1x^2^2} + \underline{0x^2^1} + \underline{1x^2^0} \\ 16 \quad + \quad 0 \quad + \quad 4 \quad + \quad 0 \quad + \quad 1 \end{array}$$

$$\underbrace{(100101)_2}_{\substack{5 \quad 4 \quad 3 \quad 2 \quad 1 \quad 0 \quad 2}}$$

$$= (37)_{10}$$

$$\underline{1x2^5} + \underline{0x2^4} + \underline{0x2^3} + \underline{1x2^2} + \underline{0x2^1} + \underline{1x2^0}$$

$$32 + 0 + 0 + 4 + 0 + 1$$

AND 2

29

2 1 1

1 1 1 0 1
0 1 0 1 1

2 (0 1 0 0 1) 2
(9) 10

OR (11)

29

11

1 1 1 0 1
0 1 0 1 1

1 (1 1 1 1 1) ~~2~~

(31)₁₀

XOR (^)

29
11

1	1	1	0	1	
0	1	0	1	1	

1 (1 0 1 1 0)₂

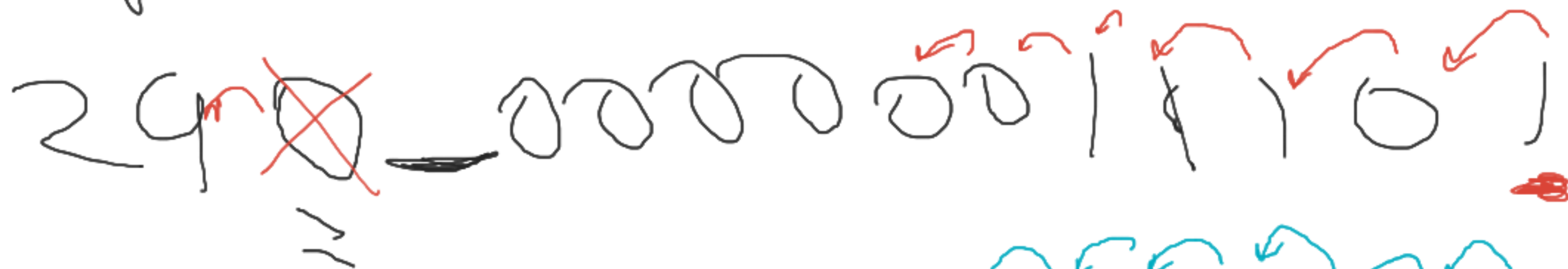
(22)₁₀

Right Shift (\gg)

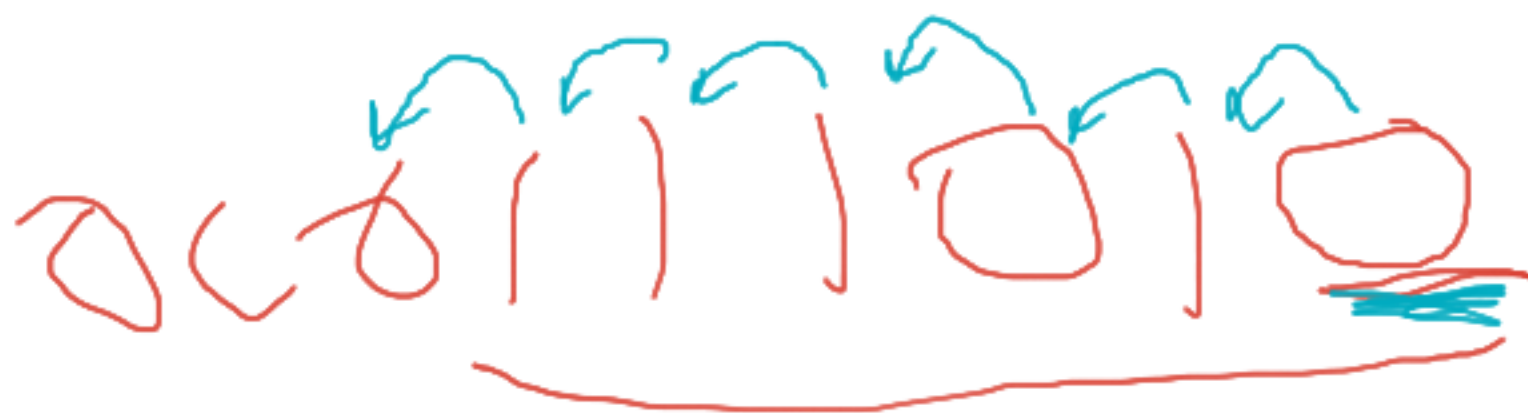
$29 \gg 1$



Left Shift (<<)



>>1



>>2

