







































1

$$\mathbb{Z}\{1\}$$

$$\iota_4 \xrightarrow{\beta^1} \beta \iota_4$$

$$\begin{array}{ccccc}
 & & \beta^1 & & \\
 & \nearrow & & \searrow & \\
 P^1 \iota_4 & & \beta P^1 \iota_4 & \xrightarrow{\beta^1} & \beta P^1 \beta \iota_4 \\
 & \searrow & P^1 \beta \iota_4 & & \\
 & & \beta^1 & & \\
 & \nearrow & & \searrow & \\
 \iota_4^2 & & \iota_4 \beta \iota_4 & & 
 \end{array}$$

$$\begin{array}{cc} \mathbb{Z}/3\{\beta(\iota_4^2)\} & \\ \mathbb{Z}/3\{\beta P^1 \iota_4\} & \mathbb{Z}/3\{\beta P^1 \beta \iota_4\} \end{array}$$

0

1

2

3

4

5

6

7

8

9

10