

$$\textcircled{1} x = 3.0232323\dots$$

$\frac{3}{5}$ Pay attention!

$$100x = 302.3232323\dots$$

period = 23

$$- x = 3.0232323\dots$$

periodicity = 2

$$99x = 209.3000000\dots$$

$$x = \frac{209.3}{99}$$

$$x = \frac{2093}{99 \times 10}$$

$$x = \frac{2093}{990}$$

$$\frac{299.3}{99} \times 1 = \frac{299.3}{99} \times \frac{10}{10} = \frac{2993}{990}$$

$$(2) x = 49.11111...$$

$$10x = 491.11111...$$

$$-x = 49.11111...$$

$$99x = 442.00000$$

$$x = 442$$

$$\frac{442}{99}$$

✓

$$(3) x = 0.7131313 \dots$$

$$100x = 09\overset{-1}{1}.3131313 \dots$$

$$x = 0.9131313 \dots$$

$$99x = 090.4000000 \dots$$

$$x = \frac{904}{99 \times 10}$$

$$x = \frac{904}{990} \quad \checkmark$$

$$x = \frac{90.4}{99} \times \frac{10}{10} = \frac{904}{990}$$

$$\underline{\underline{(4)}} x = 7.63216321\dots$$

$$10000x = 76321\overset{-1}{.}6321\dots$$

$$- \quad 1x = 7.6321\dots$$

$$9x = 76314.0000\dots$$

$$\cancel{X} x = 76314$$

$$99 \underline{\underline{\quad}}$$

$$9999x = 76314.0$$

$$x = \frac{76314}{9999}$$

$$(5) \ x = 0.142857142857 \dots$$

$$1,000,000x = 0142857.142857 \dots$$

$$\begin{array}{r} - \quad \quad \quad 1x = \quad \quad \quad 0.142857 \dots \end{array}$$

$$999999x = 0142857.000000$$

$$\begin{array}{r} x = 0142857 \\ \hline 999999 \end{array}$$



$$\begin{array}{r} \begin{array}{ccccccc} -1 & -1 & -1 & -1 & -1 & -1 & \\ 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{array} \\ - \quad 0000001 \\ \hline 0999999 \end{array}$$