

①

$$x = 3.0232323\dots$$

$$100x = \overline{3}02.3232323\dots$$

$$x = \overline{3.0232323\dots}$$

$$99x = 299.3\overline{000000\dots}$$

$$x = 2993 \div 99$$

10

$$x = \frac{2993}{10} \times \frac{1}{99}$$

$$x = 2993 \times \frac{1}{10 \times 99}$$

$$x = \frac{2993}{990}$$

✓

990

$$\begin{array}{r} + \\ 3 \\ \hline 2970 \end{array}$$

$$\begin{array}{r} 3.023\dots \\ 990) \overline{2993.00} \\ - 2970 \\ \hline 0230 \end{array}$$

$$\begin{array}{r} 0 \\ 2300 \\ - 1980 \\ \hline 3200 \\ - 2970 \\ \hline 0230 \end{array}$$

$$\begin{array}{r} 990 + 3 \\ (1000 - 10) \times 3 \\ = 3000 - 30 \\ = 2970 \end{array}$$

$$\begin{array}{r} 1 \\ 990 \\ + 2 \\ \hline 1980 \end{array}$$

②

$$x = 4\overline{9.1111\dots}$$

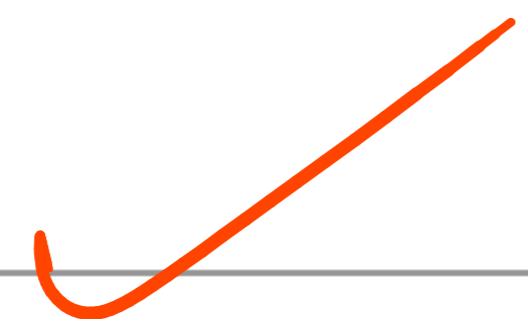
$$10x = 4\overline{91.1111\dots}$$

$$- \quad x = 4\overline{9.1111\dots}$$

$$\underline{9x = 442.0000\dots}$$

$$x = 442$$

9



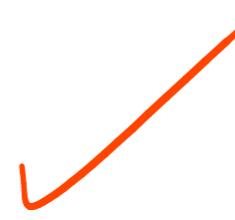
$$4\overline{9.1111\dots} \quad \checkmark$$

36

$$\begin{array}{r} 0.82 \\ - 81 \\ \hline 010 \end{array}$$

$$\begin{array}{r} 9 \\ \hline 010 \end{array}$$

$$\begin{array}{r} 9 \\ \hline 01 \dots \end{array}$$



(3)

$$x = 0.\underline{9}131313\dots$$

$$100x = 091.\underline{3}1313\dots$$

$$x = 0.9\underline{1313}\dots$$

$$99x = \underline{9040000}\dots$$

$$x = \frac{90.4}{99}$$

$$x = 90.4 \quad x1$$

$$x = \frac{90.4}{99} \quad x10$$

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

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

$$\begin{array}{r}
 & 99 \\
 & + 9 \\
 \hline
 & 891
 \end{array}
 \qquad
 \begin{array}{r}
 990 \\
 + 9 \\
 \hline
 990
 \end{array}$$

$$\begin{array}{r}
 0.91313\dots \\
 \underline{- 891.0} \\
 \hline
 904.00000\dots
 \end{array}$$

$$\begin{array}{r}
 0 \\
 - 9040 \\
 \hline
 8910
 \end{array}
 \qquad
 \begin{array}{r}
 2 \\
 990 \\
 + 3 \\
 \hline
 2970
 \end{array}$$

$$\begin{array}{r}
 071300 \\
 - 990 \\
 \hline
 03100
 \end{array}$$

$$\begin{array}{r}
 2970 \\
 - 271 \\
 \hline
 01300
 \end{array}$$

$$\begin{array}{r}
 03100 \\
 - 2970 \\
 \hline
 01300\dots
 \end{array}$$

(4)

$$x = 7.63216321\ldots$$

$$10000x = 76321.6321\ldots$$

Hihhhjhjhggjgbhhjhgjjh~~h~~hgjghjhjjhbjjghj~~b~~321...

$$9999x = 76314.0000\ldots$$

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

$$\begin{array}{r} 7.6321 \\ 9999 \overline{)76314.0000} \\ -69993 \\ \hline 063210 \end{array}$$

$$\begin{array}{r} 59984 \\ 032160 \end{array}$$

$$\begin{array}{r} 29997 \\ 021630 \\ -19998 \\ \hline 021630 \end{array}$$

$$\begin{array}{r} 016320 \\ -9999 \\ \hline 06321 \end{array}$$

$$\begin{array}{r} 555 \\ 9999 \\ 666 \\ 9999 \\ 222 \\ 9999 \\ \times 6 \quad \times 7 \quad \times 3 \\ \hline 59994 \quad 69993 \quad 29997 \\ \hline 39996 \quad 19998 \end{array}$$



5

$$x = 0.142857\overline{142857\dots}$$

$$\begin{array}{r} 33333 \\ 99999 \\ + 4 \\ \hline 399996 \\ \times 7 \\ \hline 699993 \end{array}$$

$$1,000,000x = 0142857.\overline{142857\dots}$$

$$\begin{array}{r} 11111 \\ 99999 \\ \times 2 \\ \hline 199998 \end{array}$$

$$x =$$

$$0.142857\dots$$

$$999999x = 0142857.\overline{000000\dots}$$

$$\begin{array}{r} 33333 \\ 99999 \\ \times 3 \\ \hline 799992 \end{array}$$

$$= 142\overline{857}$$

$$\overline{999999}$$

$$=\frac{1}{7} (?)$$

$$\begin{array}{r} 07142850 \\ - 69999993 \\ \hline 0142857\dots \end{array}$$

$$0.142857\dots$$

$$999999 \overline{142857.000000\dots} \times 5 \overline{499995}$$

$$\begin{array}{r} 1428570 \\ - 999999 \\ \hline 04285710 \\ - 399999 \\ \hline 01857140 \\ - 199999 \\ \hline 01857140 \\ - 199999 \\ \hline 01857140 \end{array}$$

$$\begin{array}{r} 08571420 \\ - 799999 \\ \hline 01571420 \\ - 149999 \\ \hline 01571420 \\ - 149999 \\ \hline 01571420 \end{array}$$