



Rewrite each infinitely repeating decimal as a rational number (fraction).

1)  $78.\overline{392}$

2)  $0.430\overline{79}$

3)  $1.26\overline{33}$

4)  $0.6\overline{96}$

5)  $6.823\overline{11}$

6)  $0.48\overline{65}$

7)  $4.4\overline{67}$

8)  $9.98\overline{4}$

9)  $8.154\overline{8}$

10)  $0.708\overline{9}$

**Answers**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_



Rewrite each infinitely repeating decimal as a rational number (fraction).

1)  $78.\overline{392}$

$$\begin{aligned} f &= 78.\overline{392} \\ 1,000f &= 78392.\overline{92} \\ - 10f &= 00783.\overline{92} \\ \hline 990f &= 77609 \\ f &= \frac{77609}{990} \end{aligned}$$

2)  $0.430\overline{79}$

$$\begin{aligned} f &= 0.430\overline{79} \\ 100,000f &= 43079.\overline{79} \\ - 1,000f &= 00430.\overline{79} \\ \hline 99000f &= 42649 \\ f &= \frac{42649}{99000} \end{aligned}$$

3)  $1.263\overline{3}$

$$\begin{aligned} f &= 1.263\overline{3} \\ 10,000f &= 12633.\overline{3} \\ - 1,000f &= 01263.\overline{3} \\ \hline 9000f &= 11370 \\ f &= \frac{11370}{9000} \end{aligned}$$

4)  $0.69\overline{6}$

$$\begin{aligned} f &= 0.69\overline{6} \\ 1,000f &= 696.\overline{96} \\ - 10f &= 006.\overline{96} \\ \hline 990f &= 690 \\ f &= \frac{690}{990} \end{aligned}$$

5)  $6.823\overline{11}$

$$\begin{aligned} f &= 6.823\overline{11} \\ 100,000f &= 682311.\overline{11} \\ - 1,000f &= 006823.\overline{11} \\ \hline 99000f &= 675488 \\ f &= \frac{675488}{99000} \end{aligned}$$

6)  $0.486\overline{5}$

$$\begin{aligned} f &= 0.486\overline{5} \\ 10,000f &= 4865.\overline{65} \\ - 100f &= 0048.\overline{65} \\ \hline 9900f &= 4817 \\ f &= \frac{4817}{9900} \end{aligned}$$

7)  $4.46\overline{7}$

$$\begin{aligned} f &= 4.46\overline{7} \\ 1,000f &= 4467.\overline{7} \\ - 100f &= 0446.\overline{7} \\ \hline 900f &= 4021 \\ f &= \frac{4021}{900} \end{aligned}$$

8)  $9.984\overline{4}$

$$\begin{aligned} f &= 9.984\overline{4} \\ 1,000f &= 9984.\overline{84} \\ - 10f &= 0099.\overline{84} \\ \hline 990f &= 9885 \\ f &= \frac{9885}{990} \end{aligned}$$

9)  $8.154\overline{8}$

$$\begin{aligned} f &= 8.154\overline{8} \\ 10,000f &= 81548.\overline{8} \\ - 100f &= 00815.\overline{48} \\ \hline 9900f &= 80733 \\ f &= \frac{80733}{9900} \end{aligned}$$

10)  $0.708\overline{9}$

$$\begin{aligned} f &= 0.708\overline{9} \\ 10,000f &= 7089.\overline{9} \\ - 1,000f &= 0709.\overline{9} \\ \hline 9000f &= 6381 \\ f &= \frac{6381}{9000} \end{aligned}$$

**Answers**

1.  $\frac{77609}{990}$
2.  $\frac{42649}{99000}$
3.  $\frac{11370}{9000}$
4.  $\frac{690}{990}$
5.  $\frac{675488}{99000}$
6.  $\frac{4817}{9900}$
7.  $\frac{4021}{900}$
8.  $\frac{9885}{990}$
9.  $\frac{80733}{9900}$
10.  $\frac{6381}{9000}$