



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

Answers

1) $0.929\overline{58}$

2) $9.679\overline{4}$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3) $0.57\overline{1}$

4) $0.536\overline{0}$

5) $0.399\overline{4}$

6) $6.370\overline{75}$

7) $4.81\overline{6}$

8) $3.361\overline{1}$

9) $1.72\overline{5}$

10) $0.11\overline{6}$



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

Answers

$$\begin{aligned} 1) \quad & 0.92\overline{958} \\ & f = 0.929\overline{58} \\ & 100,000f = 92958.\overline{58} \\ & - 1,000f = 0929.\overline{58} \\ & \hline & 99000f = 92029 \\ & f = \frac{92029}{99000} \end{aligned}$$

$$\begin{aligned} 2) \quad & 9.679\overline{4} \\ & f = 9.679\overline{4} \\ & 10,000f = 96794.\overline{4} \\ & - 1,000f = 09679.\overline{4} \\ & \hline & 9000f = 87115 \\ & f = \frac{87115}{9000} \end{aligned}$$

$$\begin{aligned} 3) \quad & 0.57\overline{1} \\ & f = 0.57\overline{1} \\ & 1,000f = 571.\overline{1} \\ & - 100f = 057.\overline{1} \\ & \hline & 900f = 514 \\ & f = \frac{514}{900} \end{aligned}$$

$$\begin{aligned} 4) \quad & 0.536\overline{0} \\ & f = 0.536\overline{0} \\ & 10,000f = 5360.\overline{60} \\ & - 100f = 0053.\overline{60} \\ & \hline & 9900f = 5307 \\ & f = \frac{5307}{9900} \end{aligned}$$

$$\begin{aligned} 5) \quad & 0.399\overline{4} \\ & f = 0.399\overline{4} \\ & 10,000f = 3994.\overline{4} \\ & - 1,000f = 0399.\overline{4} \\ & \hline & 9000f = 3595 \\ & f = \frac{3595}{9000} \end{aligned}$$

$$\begin{aligned} 6) \quad & 6.370\overline{75} \\ & f = 6.370\overline{75} \\ & 100,000f = 637075.\overline{75} \\ & - 1,000f = 006370.\overline{75} \\ & \hline & 99000f = 630705 \\ & f = \frac{630705}{99000} \end{aligned}$$

$$\begin{aligned} 7) \quad & 4.81\overline{6} \\ & f = 4.81\overline{6} \\ & 1,000f = 4816.\overline{16} \\ & - 10f = 0048.\overline{16} \\ & \hline & 990f = 4768 \\ & f = \frac{4768}{990} \end{aligned}$$

$$\begin{aligned} 8) \quad & 3.361\overline{1} \\ & f = 3.361\overline{1} \\ & 10,000f = 33611.\overline{11} \\ & - 100f = 00336.\overline{11} \\ & \hline & 9900f = 33275 \\ & f = \frac{33275}{9900} \end{aligned}$$

$$\begin{aligned} 9) \quad & 1.72\overline{5} \\ & f = 1.72\overline{5} \\ & 1,000f = 1725.\overline{5} \\ & - 100f = 0172.\overline{5} \\ & \hline & 900f = 1553 \\ & f = \frac{1553}{900} \end{aligned}$$

$$\begin{aligned} 10) \quad & 0.11\overline{6} \\ & f = 0.11\overline{6} \\ & 1,000f = 116.\overline{16} \\ & - 10f = 001.\overline{16} \\ & \hline & 990f = 115 \\ & f = \frac{115}{990} \end{aligned}$$

1.	$\frac{92,029}{99,000}$
2.	$\frac{87,115}{9,000}$
3.	$\frac{514}{900}$
4.	$\frac{5,307}{9,900}$
5.	$\frac{3,595}{9,000}$
6.	$\frac{630,705}{99,000}$
7.	$\frac{4,768}{990}$
8.	$\frac{33,275}{9,900}$
9.	$\frac{1,553}{900}$
10.	$\frac{115}{990}$