



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

Answers

1) $0.497\overline{71}$

2) $0.44\overline{8}$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3) $0.952\overline{4}$

4) $36.98\overline{2}$

5) $4.546\overline{5}$

6) $8.47\overline{4}$

7) $0.37\overline{7}$

8) $4.96\overline{8}$

9) $91.8\overline{3}$

10) $8.192\overline{13}$



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

Answers

1) $0.497\overline{71}$

$$f = 0.497\overline{71}$$

$$100,000f = 49771.\overline{71}$$

$$\begin{array}{r} 100,000f = 49771.\overline{71} \\ - 1,000f = 00497.\overline{71} \\ \hline 99000f = 49274 \end{array}$$

$$99000f = 49274$$

$$f = \frac{49274}{99000}$$

2) $0.4\overline{48}$

$$f = 0.4\overline{48}$$

$$1,000f = 448.\overline{48}$$

$$\begin{array}{r} 1,000f = 448.\overline{48} \\ - 10f = 004.\overline{48} \\ \hline 990f = 444 \end{array}$$

$$990f = 444$$

$$f = \frac{444}{990}$$

3) $0.952\overline{4}$

$$f = 0.952\overline{4}$$

$$10,000f = 9524.\overline{4}$$

$$\begin{array}{r} 10,000f = 9524.\overline{4} \\ - 1,000f = 0952.\overline{4} \\ \hline 9000f = 8572 \end{array}$$

$$9000f = 8572$$

$$f = \frac{8572}{9000}$$

4) $36.98\overline{2}$

$$f = 36.98\overline{2}$$

$$1,000f = 36982.\overline{2}$$

$$\begin{array}{r} 1,000f = 36982.\overline{2} \\ - 10f = 00369.\overline{2} \\ \hline 990f = 36613 \end{array}$$

$$990f = 36613$$

$$f = \frac{36613}{990}$$

5) $4.546\overline{5}$

$$f = 4.546\overline{5}$$

$$10,000f = 45465.\overline{5}$$

$$\begin{array}{r} 10,000f = 45465.\overline{5} \\ - 1,000f = 04546.\overline{5} \\ \hline 9000f = 40919 \end{array}$$

$$9000f = 40919$$

$$f = \frac{40919}{9000}$$

6) $8.47\overline{4}$

$$f = 8.47\overline{4}$$

$$1,000f = 8474.\overline{4}$$

$$\begin{array}{r} 1,000f = 8474.\overline{4} \\ - 100f = 0847.\overline{4} \\ \hline 900f = 7627 \end{array}$$

$$900f = 7627$$

$$f = \frac{7627}{900}$$

7) $0.37\overline{7}$

$$f = 0.37\overline{7}$$

$$1,000f = 377.\overline{7}$$

$$\begin{array}{r} 1,000f = 377.\overline{7} \\ - 100f = 037.\overline{7} \\ \hline 900f = 340 \end{array}$$

$$900f = 340$$

$$f = \frac{340}{900}$$

8) $4.96\overline{8}$

$$f = 4.96\overline{8}$$

$$1,000f = 4968.\overline{8}$$

$$\begin{array}{r} 1,000f = 4968.\overline{8} \\ - 10f = 0049.\overline{8} \\ \hline 990f = 4919 \end{array}$$

$$990f = 4919$$

$$f = \frac{4919}{990}$$

9) $91.8\overline{3}$

$$f = 91.8\overline{3}$$

$$100f = 9183.\overline{3}$$

$$\begin{array}{r} 100f = 9183.\overline{3} \\ - 10f = 0918.\overline{3} \\ \hline 90f = 8265 \end{array}$$

$$90f = 8265$$

$$f = \frac{8265}{90}$$

10) $8.1921\overline{3}$

$$f = 8.1921\overline{3}$$

$$100,000f = 819213.\overline{3}$$

$$\begin{array}{r} 100,000f = 819213.\overline{3} \\ - 1,000f = 008192.\overline{3} \\ \hline 99000f = 811021 \end{array}$$

$$99000f = 811021$$

$$f = \frac{811021}{99000}$$

1.	$\frac{49274}{99000}$
2.	$\frac{444}{990}$
3.	$\frac{8572}{9000}$
4.	$\frac{36613}{990}$
5.	$\frac{40919}{9000}$
6.	$\frac{7627}{900}$
7.	$\frac{340}{900}$
8.	$\frac{4919}{990}$
9.	$\frac{8265}{90}$
10.	$\frac{811021}{99000}$