



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

Answers

1) $0.9\overline{20}$

2) $5.25\overline{49}$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3) $0.4\overline{25}$

4) $7.7\overline{78}$

5) $0.32\overline{95}$

6) $1.6\overline{1}$

7) $49.8\overline{31}$

8) $7.10\overline{5}$

9) $0.828\overline{16}$

10) $8.953\overline{66}$



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

Answers

1) $0.9\overline{20}$

$$f = 0.9\overline{20}$$

$$1,000f = 920.\overline{20}$$

$$\begin{array}{r} - 10f = 009.\overline{20} \\ \hline \end{array}$$

$$990f = 911$$

$$f = \frac{911}{990}$$

2) $5.254\overline{9}$

$$f = 5.254\overline{9}$$

$$10,000f = 52549.\overline{49}$$

$$\begin{array}{r} - 100f = 00525.\overline{49} \\ \hline \end{array}$$

$$9900f = 52024$$

$$f = \frac{52024}{9900}$$

3) $0.42\overline{5}$

$$f = 0.42\overline{5}$$

$$1,000f = 425.\overline{5}$$

$$\begin{array}{r} - 100f = 042.\overline{5} \\ \hline \end{array}$$

$$900f = 383$$

$$f = \frac{383}{900}$$

4) $7.7\overline{78}$

$$f = 7.7\overline{78}$$

$$1,000f = 7778.\overline{78}$$

$$\begin{array}{r} - 10f = 0077.\overline{78} \\ \hline \end{array}$$

$$990f = 7701$$

$$f = \frac{7701}{990}$$

5) $0.329\overline{5}$

$$f = 0.329\overline{5}$$

$$10,000f = 3295.\overline{95}$$

$$\begin{array}{r} - 100f = 0032.\overline{95} \\ \hline \end{array}$$

$$9900f = 3263$$

$$f = \frac{3263}{9900}$$

6) $1.6\overline{1}$

$$f = 1.6\overline{1}$$

$$100f = 161.\overline{1}$$

$$\begin{array}{r} - 10f = 016.\overline{1} \\ \hline \end{array}$$

$$90f = 145$$

$$f = \frac{145}{90}$$

7) $49.83\overline{1}$

$$f = 49.83\overline{1}$$

$$1,000f = 49831.\overline{31}$$

$$\begin{array}{r} - 10f = 00498.\overline{31} \\ \hline \end{array}$$

$$990f = 49333$$

$$f = \frac{49333}{990}$$

8) $7.10\overline{5}$

$$f = 7.10\overline{5}$$

$$1,000f = 7105.\overline{5}$$

$$\begin{array}{r} - 100f = 0710.\overline{5} \\ \hline \end{array}$$

$$900f = 6395$$

$$f = \frac{6395}{900}$$

9) $0.8281\overline{6}$

$$f = 0.8281\overline{6}$$

$$100,000f = 82816.\overline{16}$$

$$\begin{array}{r} - 1,000f = 00828.\overline{16} \\ \hline \end{array}$$

$$99000f = 81988$$

$$f = \frac{81988}{99000}$$

10) $8.9536\overline{6}$

$$f = 8.9536\overline{6}$$

$$100,000f = 895366.\overline{66}$$

$$\begin{array}{r} - 1,000f = 008953.\overline{66} \\ \hline \end{array}$$

$$99000f = 886413$$

$$f = \frac{886413}{99000}$$

1. $\frac{911}{990}$
2. $\frac{52024}{9900}$
3. $\frac{383}{900}$
4. $\frac{7701}{990}$
5. $\frac{3263}{9900}$
6. $\frac{145}{90}$
7. $\frac{49333}{990}$
8. $\frac{6395}{900}$
9. $\frac{81988}{99000}$
10. $\frac{886413}{99000}$