



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

Answers

1)  $0.85\bar{2}$

2)  $0.52\bar{80}$

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

3)  $9.4\bar{25}$

4)  $0.6\bar{47}$

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

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

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

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

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

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

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

5)  $8.137\bar{17}$

6)  $0.792\bar{74}$

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

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

7)  $6.535\bar{9}$

8)  $96.5\bar{76}$

9)  $4.93\bar{5}$

10)  $0.298\bar{9}$



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

1)  $0.85\bar{2}$

$$f = 0.85\bar{2}$$

$$1,000f = 852.\bar{2}$$

$$\begin{array}{r} 1,000f = 852.\bar{2} \\ - 100f = 085.\bar{2} \\ \hline 900f = 767 \end{array}$$

$$900f = 767$$

$$f = \frac{767}{900}$$

2)  $0.52\bar{80}$

$$f = 0.52\bar{80}$$

$$10,000f = 5280.\bar{80}$$

$$\begin{array}{r} 10,000f = 5280.\bar{80} \\ - 100f = 0052.\bar{80} \\ \hline 9900f = 5228 \end{array}$$

$$9900f = 5228$$

$$f = \frac{5228}{9900}$$

3)  $9.4\bar{25}$

$$f = 9.4\bar{25}$$

$$1,000f = 9425.\bar{25}$$

$$\begin{array}{r} 1,000f = 9425.\bar{25} \\ - 10f = 0094.\bar{25} \\ \hline 990f = 9331 \end{array}$$

$$990f = 9331$$

$$f = \frac{9331}{990}$$

4)  $0.6\bar{47}$

$$f = 0.6\bar{47}$$

$$1,000f = 647.\bar{47}$$

$$\begin{array}{r} 1,000f = 647.\bar{47} \\ - 10f = 006.\bar{47} \\ \hline 990f = 641 \end{array}$$

$$990f = 641$$

$$f = \frac{641}{990}$$

5)  $8.137\bar{17}$

$$f = 8.137\bar{17}$$

$$100,000f = 813717.\bar{17}$$

$$\begin{array}{r} 100,000f = 813717.\bar{17} \\ - 1,000f = 008137.\bar{17} \\ \hline 99000f = 805580 \end{array}$$

$$99000f = 805580$$

$$f = \frac{805580}{99000}$$

6)  $0.792\bar{74}$

$$f = 0.792\bar{74}$$

$$100,000f = 79274.\bar{74}$$

$$\begin{array}{r} 100,000f = 79274.\bar{74} \\ - 1,000f = 00792.\bar{74} \\ \hline 99000f = 78482 \end{array}$$

$$99000f = 78482$$

$$f = \frac{78482}{99000}$$

7)  $6.535\bar{9}$

$$f = 6.535\bar{9}$$

$$10,000f = 65359.\bar{9}$$

$$\begin{array}{r} 10,000f = 65359.\bar{9} \\ - 1,000f = 06536.\bar{9} \\ \hline 9000f = 58824 \end{array}$$

$$9000f = 58824$$

$$f = \frac{58824}{9000}$$

8)  $96.5\bar{76}$

$$f = 96.5\bar{76}$$

$$1,000f = 96576.\bar{76}$$

$$\begin{array}{r} 1,000f = 96576.\bar{76} \\ - 10f = 00965.\bar{76} \\ \hline 990f = 95611 \end{array}$$

$$990f = 95611$$

$$f = \frac{95611}{990}$$

9)  $4.9\bar{35}$

$$f = 4.9\bar{35}$$

$$1,000f = 4935.\bar{5}$$

$$\begin{array}{r} 1,000f = 4935.\bar{5} \\ - 100f = 0493.\bar{5} \\ \hline 900f = 4442 \end{array}$$

$$900f = 4442$$

$$f = \frac{4442}{900}$$

10)  $0.298\bar{9}$

$$f = 0.298\bar{9}$$

$$10,000f = 2989.\bar{9}$$

$$\begin{array}{r} 10,000f = 2989.\bar{9} \\ - 1,000f = 0299.\bar{9} \\ \hline 9000f = 2691 \end{array}$$

$$9000f = 2691$$

$$f = \frac{2691}{9000}$$

**Answers**

1.  $\frac{767}{900}$

2.  $\frac{5228}{9900}$

3.  $\frac{9331}{990}$

4.  $\frac{641}{990}$

5.  $\frac{805580}{99000}$

6.  $\frac{78482}{99000}$

7.  $\frac{58824}{9000}$

8.  $\frac{95611}{990}$

9.  $\frac{4442}{900}$

10.  $\frac{2691}{9000}$