



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

Answers

1) $41.\overline{24}$

2) $7.40\overline{64}$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3) $3.\overline{62}$

4) $3.35\overline{6}$

5) $0.546\overline{26}$

6) $0.35\overline{0}$

7) $0.47\overline{5}$

8) $8.56\overline{8}$

9) $2.829\overline{9}$

10) $35.21\overline{2}$



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

Answers

1) $41.\overline{24}$

$$\begin{array}{r} f = 41.\overline{24} \\ 100f = 4124.\overline{24} \\ - 10f = 412.\overline{24} \\ \hline 90f = 3712 \\ f = \frac{3712}{90} \end{array}$$

2) $7.40\overline{64}$

$$\begin{array}{r} f = 7.40\overline{64} \\ 10,000f = 74064.\overline{64} \\ - 100f = 740.\overline{64} \\ \hline 9900f = 73324 \\ f = \frac{73324}{9900} \end{array}$$

3) $3.\overline{62}$

$$\begin{array}{r} f = 3.\overline{62} \\ 100f = 362.\overline{2} \\ - 10f = 36.\overline{2} \\ \hline 90f = 326 \\ f = \frac{326}{90} \end{array}$$

4) $3.35\overline{6}$

$$\begin{array}{r} f = 3.35\overline{6} \\ 1,000f = 3356.\overline{6} \\ - 100f = 335.\overline{6} \\ \hline 900f = 3021 \\ f = \frac{3021}{900} \end{array}$$

5) $0.546\overline{26}$

$$\begin{array}{r} f = 0.546\overline{26} \\ 100,000f = 54626.\overline{26} \\ - 1,000f = 546.\overline{26} \\ \hline 99000f = 54080 \\ f = \frac{54080}{99000} \end{array}$$

6) $0.35\overline{0}$

$$\begin{array}{r} f = 0.35\overline{0} \\ 1,000f = 350.\overline{0} \\ - 10f = 3.5\overline{0} \\ \hline 990f = 347 \\ f = \frac{347}{990} \end{array}$$

7) $0.47\overline{5}$

$$\begin{array}{r} f = 0.47\overline{5} \\ 1,000f = 475.\overline{5} \\ - 100f = 47.\overline{5} \\ \hline 900f = 428 \\ f = \frac{428}{900} \end{array}$$

8) $8.56\overline{8}$

$$\begin{array}{r} f = 8.56\overline{8} \\ 1,000f = 8568.\overline{8} \\ - 10f = 85.\overline{8} \\ \hline 990f = 8483 \\ f = \frac{8483}{990} \end{array}$$

9) $2.829\overline{9}$

$$\begin{array}{r} f = 2.829\overline{9} \\ 10,000f = 28299.\overline{9} \\ - 1,000f = 2830.\overline{9} \\ \hline 9000f = 25470 \\ f = \frac{25470}{9000} \end{array}$$

10) $35.21\overline{2}$

$$\begin{array}{r} f = 35.21\overline{2} \\ 1,000f = 35212.\overline{2} \\ - 10f = 352.\overline{2} \\ \hline 990f = 34860 \\ f = \frac{34860}{990} \end{array}$$

1.	$\frac{3,712}{90}$
2.	$\frac{73,324}{9,900}$
3.	$\frac{326}{90}$
4.	$\frac{3,021}{900}$
5.	$\frac{54,080}{99,000}$
6.	$\frac{347}{990}$
7.	$\frac{428}{900}$
8.	$\frac{8,483}{990}$
9.	$\frac{25,470}{9,000}$
10.	$\frac{34,860}{990}$