



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

Answers

1) $0.55\overline{135}$

2) $0.30\overline{41}$

1. _____

2. _____

3) $35.1\overline{39}$

4) $5.7\overline{4}$

3. _____

4. _____

5) $8.151\overline{51}$

6) $5.545\overline{9}$

5. _____

6. _____

7) $6.41\overline{32}$

8) $3.28\overline{9}$

7. _____

8. _____

9) $0.5\overline{31}$

10) $0.83\overline{1}$

9. _____

10. _____



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

Answers

$$\begin{aligned} 1) \quad & 0.55\overline{135} \\ & f = 0.55\overline{135} \\ & 100,000f = 55135.\overline{35} \\ & - \quad 1,000f = 00551.\overline{35} \\ & \hline & 99000f = 54584 \\ & f = \frac{54584}{99000} \end{aligned}$$

$$\begin{aligned} 2) \quad & 0.30\overline{41} \\ & f = 0.30\overline{41} \\ & 10,000f = 3041.\overline{41} \\ & - \quad 100f = 0030.\overline{41} \\ & \hline & 9900f = 3011 \\ & f = \frac{3011}{9900} \end{aligned}$$

$$\begin{aligned} 3) \quad & 35.\overline{139} \\ & f = 35.\overline{139} \\ & 1,000f = 35139.\overline{39} \\ & - \quad 10f = 00351.\overline{39} \\ & \hline & 990f = 34788 \\ & f = \frac{34788}{990} \end{aligned}$$

$$\begin{aligned} 4) \quad & 5.\overline{74} \\ & f = 5.\overline{74} \\ & 100f = 574.\overline{4} \\ & - \quad 10f = 057.\overline{4} \\ & \hline & 90f = 517 \\ & f = \frac{517}{90} \end{aligned}$$

$$\begin{aligned} 5) \quad & 8.15\overline{151} \\ & f = 8.15\overline{151} \\ & 100,000f = 815151.\overline{51} \\ & - \quad 1,000f = 008151.\overline{51} \\ & \hline & 99000f = 807000 \\ & f = \frac{807000}{99000} \end{aligned}$$

$$\begin{aligned} 6) \quad & 5.54\overline{59} \\ & f = 5.54\overline{59} \\ & 10,000f = 55459.\overline{9} \\ & - \quad 1,000f = 05546.\overline{9} \\ & \hline & 9000f = 49914 \\ & f = \frac{49914}{9000} \end{aligned}$$

$$\begin{aligned} 7) \quad & 6.41\overline{32} \\ & f = 6.41\overline{32} \\ & 10,000f = 64132.\overline{32} \\ & - \quad 100f = 00641.\overline{32} \\ & \hline & 9900f = 63491 \\ & f = \frac{63491}{9900} \end{aligned}$$

$$\begin{aligned} 8) \quad & 3.28\overline{9} \\ & f = 3.28\overline{9} \\ & 1,000f = 3289.\overline{9} \\ & - \quad 100f = 0329.\overline{9} \\ & \hline & 900f = 2961 \\ & f = \frac{2961}{900} \end{aligned}$$

$$\begin{aligned} 9) \quad & 0.5\overline{31} \\ & f = 0.5\overline{31} \\ & 1,000f = 531.\overline{31} \\ & - \quad 10f = 005.\overline{31} \\ & \hline & 990f = 526 \\ & f = \frac{526}{990} \end{aligned}$$

$$\begin{aligned} 10) \quad & 0.8\overline{31} \\ & f = 0.8\overline{31} \\ & 1,000f = 831.\overline{1} \\ & - \quad 100f = 083.\overline{1} \\ & \hline & 900f = 748 \\ & f = \frac{748}{900} \end{aligned}$$

1. $\frac{54584}{99000}$
2. $\frac{3011}{9900}$
3. $\frac{34788}{990}$
4. $\frac{517}{90}$
5. $\frac{807000}{99000}$
6. $\frac{49914}{9000}$
7. $\frac{63491}{9900}$
8. $\frac{2961}{900}$
9. $\frac{526}{990}$
10. $\frac{748}{900}$