



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

Answers

1) $6.2\bar{9}$

2) $0.75\bar{2}$

1. _____

3) $0.393\bar{2}$

4) $68.4\bar{33}$

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

5) $6.48\bar{39}$

6) $21.7\bar{8}$

9. _____

10. _____

7) $3.530\bar{9}$

8) $1.837\bar{79}$

9) $7.92\bar{8}$

10) $3.7\bar{30}$



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

Answers

$$\begin{aligned}
 1) \quad & 6.2\bar{9} \\
 & f = 6.2\bar{9} \\
 & 100f = 629.\bar{9} \\
 & - 10f = 063.\bar{9} \\
 \hline
 & 90f = 567 \\
 & f = \frac{567}{90}
 \end{aligned}$$

$$\begin{aligned}
 2) \quad & 0.75\bar{2} \\
 & f = 0.75\bar{2} \\
 & 1,000f = 752.\bar{2} \\
 & - 100f = 075.\bar{2} \\
 \hline
 & 900f = 677 \\
 & f = \frac{677}{900}
 \end{aligned}$$

$$\begin{aligned}
 3) \quad & 0.393\bar{2} \\
 & f = 0.393\bar{2} \\
 & 10,000f = 3932.\bar{2} \\
 & - 1,000f = 0393.\bar{2} \\
 \hline
 & 9000f = 3539 \\
 & f = \frac{3539}{9000}
 \end{aligned}$$

$$\begin{aligned}
 4) \quad & 68.4\bar{33} \\
 & f = 68.4\bar{33} \\
 & 1,000f = 68433.\bar{33} \\
 & - 10f = 00684.\bar{33} \\
 \hline
 & 990f = 67749 \\
 & f = \frac{67749}{990}
 \end{aligned}$$

$$\begin{aligned}
 5) \quad & 6.48\bar{39} \\
 & f = 6.48\bar{39} \\
 & 10,000f = 64839.\bar{39} \\
 & - 100f = 00648.\bar{39} \\
 \hline
 & 9900f = 64191 \\
 & f = \frac{64191}{9900}
 \end{aligned}$$

$$\begin{aligned}
 6) \quad & 21.7\bar{8} \\
 & f = 21.7\bar{8} \\
 & 100f = 2178.\bar{8} \\
 & - 10f = 0217.\bar{8} \\
 \hline
 & 90f = 1961 \\
 & f = \frac{1961}{90}
 \end{aligned}$$

$$\begin{aligned}
 7) \quad & 3.530\bar{9} \\
 & f = 3.530\bar{9} \\
 & 10,000f = 35309.\bar{9} \\
 & - 1,000f = 03531.\bar{9} \\
 \hline
 & 9000f = 31779 \\
 & f = \frac{31779}{9000}
 \end{aligned}$$

$$\begin{aligned}
 8) \quad & 1.837\bar{79} \\
 & f = 1.837\bar{79} \\
 & 100,000f = 183779.\bar{79} \\
 & - 1,000f = 001837.\bar{79} \\
 \hline
 & 99000f = 181942 \\
 & f = \frac{181942}{99000}
 \end{aligned}$$

$$\begin{aligned}
 9) \quad & 7.92\bar{8} \\
 & f = 7.92\bar{8} \\
 & 1,000f = 7928.\bar{8} \\
 & - 100f = 0792.\bar{8} \\
 \hline
 & 900f = 7136 \\
 & f = \frac{7136}{900}
 \end{aligned}$$

$$\begin{aligned}
 10) \quad & 3.7\bar{30} \\
 & f = 3.7\bar{30} \\
 & 1,000f = 3730.\bar{30} \\
 & - 10f = 0037.\bar{30} \\
 \hline
 & 990f = 3693 \\
 & f = \frac{3693}{990}
 \end{aligned}$$

1. $\frac{567}{90}$
2. $\frac{677}{900}$
3. $\frac{3539}{9000}$
4. $\frac{67749}{990}$
5. $\frac{64191}{9900}$
6. $\frac{1961}{90}$
7. $\frac{31779}{9000}$
8. $\frac{181942}{99000}$
9. $\frac{7136}{900}$
10. $\frac{3693}{990}$