



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).

1)  $6.2\bar{9}$

$$\begin{aligned} f &= 6.2\bar{9} \\ 100f &= 629.\bar{9} \\ - 10f &= 63.\bar{9} \\ \hline 90f &= 567 \\ f &= \frac{567}{90} \end{aligned}$$

2)  $0.75\bar{2}$

$$\begin{aligned} f &= 0.75\bar{2} \\ 1,000f &= 752.\bar{2} \\ - 100f &= 75.\bar{2} \\ \hline 900f &= 677 \\ f &= \frac{677}{900} \end{aligned}$$

3)  $0.393\bar{2}$

$$\begin{aligned} f &= 0.393\bar{2} \\ 10,000f &= 3932.\bar{2} \\ - 1,000f &= 393.\bar{2} \\ \hline 9000f &= 3539 \\ f &= \frac{3539}{9000} \end{aligned}$$

4)  $68.4\bar{33}$

$$\begin{aligned} f &= 68.4\bar{33} \\ 1,000f &= 68433.\bar{33} \\ - 10f &= 684.\bar{33} \\ \hline 990f &= 67749 \\ f &= \frac{67749}{990} \end{aligned}$$

5)  $6.48\bar{39}$

$$\begin{aligned} f &= 6.48\bar{39} \\ 10,000f &= 64839.\bar{39} \\ - 100f &= 648.\bar{39} \\ \hline 9900f &= 64191 \\ f &= \frac{64191}{9900} \end{aligned}$$

6)  $21.7\bar{8}$

$$\begin{aligned} f &= 21.7\bar{8} \\ 100f &= 2178.\bar{8} \\ - 10f &= 217.\bar{8} \\ \hline 90f &= 1961 \\ f &= \frac{1961}{90} \end{aligned}$$

7)  $3.530\bar{9}$

$$\begin{aligned} f &= 3.530\bar{9} \\ 10,000f &= 35309.\bar{9} \\ - 1,000f &= 3531.\bar{9} \\ \hline 9000f &= 31779 \\ f &= \frac{31779}{9000} \end{aligned}$$

8)  $1.837\bar{79}$

$$\begin{aligned} f &= 1.837\bar{79} \\ 100,000f &= 183779.\bar{79} \\ - 1,000f &= 1837.\bar{79} \\ \hline 99000f &= 181942 \\ f &= \frac{181942}{99000} \end{aligned}$$

9)  $7.92\bar{8}$

$$\begin{aligned} f &= 7.92\bar{8} \\ 1,000f &= 7928.\bar{8} \\ - 100f &= 792.\bar{8} \\ \hline 900f &= 7136 \\ f &= \frac{7136}{900} \end{aligned}$$

10)  $3.7\bar{30}$

$$\begin{aligned} f &= 3.7\bar{30} \\ 1,000f &= 3730.\bar{30} \\ - 10f &= 37.\bar{30} \\ \hline 990f &= 3693 \\ f &= \frac{3693}{990} \end{aligned}$$

**Answers**

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.  $\frac{3693}{990}$