



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

Answers

1)  $0.344\overline{26}$

2)  $6.411\overline{52}$

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

3)  $3.5\overline{74}$

4)  $6.77\overline{78}$

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

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

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

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

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

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

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

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

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

5)  $7.9\overline{6}$

6)  $56.2\overline{67}$

7)  $0.78\overline{51}$

8)  $17.6\overline{7}$

9)  $3.308\overline{9}$

10)  $0.58\overline{51}$



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

$$\begin{aligned}
 &1) \quad 0.344\overline{26} \\
 &f = 0.344\overline{26} \\
 &100,000f = 34426.\overline{26} \\
 &- \quad 1,000f = 00344.\overline{26} \\
 &\hline
 &99000f = 34082 \\
 &f = \frac{34082}{99000}
 \end{aligned}$$

$$\begin{aligned}
 &2) \quad 6.411\overline{52} \\
 &f = 6.411\overline{52} \\
 &100,000f = 641152.\overline{52} \\
 &- \quad 1,000f = 006411.\overline{52} \\
 &\hline
 &99000f = 634741 \\
 &f = \frac{634741}{99000}
 \end{aligned}$$

$$\begin{aligned}
 &3) \quad 3.5\overline{74} \\
 &f = 3.5\overline{74} \\
 &1,000f = 3574.\overline{74} \\
 &- \quad 10f = 0035.\overline{74} \\
 &\hline
 &990f = 3539 \\
 &f = \frac{3539}{990}
 \end{aligned}$$

$$\begin{aligned}
 &4) \quad 6.7\overline{778} \\
 &f = 6.7\overline{778} \\
 &10,000f = 67778.\overline{78} \\
 &- \quad 100f = 00677.\overline{78} \\
 &\hline
 &9900f = 67101 \\
 &f = \frac{67101}{9900}
 \end{aligned}$$

$$\begin{aligned}
 &5) \quad 7.9\overline{6} \\
 &f = 7.9\overline{6} \\
 &100f = 796.\overline{6} \\
 &- \quad 10f = 079.\overline{6} \\
 &\hline
 &90f = 717 \\
 &f = \frac{717}{90}
 \end{aligned}$$

$$\begin{aligned}
 &6) \quad 56.2\overline{67} \\
 &f = 56.2\overline{67} \\
 &1,000f = 56267.\overline{67} \\
 &- \quad 10f = 00562.\overline{67} \\
 &\hline
 &990f = 55705 \\
 &f = \frac{55705}{990}
 \end{aligned}$$

$$\begin{aligned}
 &7) \quad 0.785\overline{1} \\
 &f = 0.785\overline{1} \\
 &10,000f = 7851.\overline{51} \\
 &- \quad 100f = 0078.\overline{51} \\
 &\hline
 &9900f = 7773 \\
 &f = \frac{7773}{9900}
 \end{aligned}$$

$$\begin{aligned}
 &8) \quad 17.6\overline{7} \\
 &f = 17.6\overline{7} \\
 &100f = 1767.\overline{7} \\
 &- \quad 10f = 0176.\overline{7} \\
 &\hline
 &90f = 1591 \\
 &f = \frac{1591}{90}
 \end{aligned}$$

$$\begin{aligned}
 &9) \quad 3.308\overline{9} \\
 &f = 3.308\overline{9} \\
 &10,000f = 33089.\overline{9} \\
 &- \quad 1,000f = 03309.\overline{9} \\
 &\hline
 &9000f = 29781 \\
 &f = \frac{29781}{9000}
 \end{aligned}$$

$$\begin{aligned}
 &10) \quad 0.585\overline{1} \\
 &f = 0.585\overline{1} \\
 &10,000f = 5851.\overline{1} \\
 &- \quad 1,000f = 0585.\overline{1} \\
 &\hline
 &9000f = 5266 \\
 &f = \frac{5266}{9000}
 \end{aligned}$$

**Answers**

1.  $\frac{34082}{99000}$

2.  $\frac{634741}{99000}$

3.  $\frac{3539}{990}$

4.  $\frac{67101}{9900}$

5.  $\frac{717}{90}$

6.  $\frac{55705}{990}$

7.  $\frac{7773}{9900}$

8.  $\frac{1591}{90}$

9.  $\frac{29781}{9000}$

10.  $\frac{5266}{9000}$