



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

Answers

1) $0.603\overline{58}$

2) $0.5\overline{22}$

1. _____

2. _____

3) $0.685\overline{7}$

4) $68.7\overline{49}$

3. _____

4. _____

5) $97.1\overline{6}$

6) $6.544\overline{7}$

5. _____

6. _____

7) $7.333\overline{1}$

8) $1.784\overline{56}$

7. _____

8. _____

9) $0.734\overline{9}$

10) $1.9\overline{48}$

9. _____

10. _____



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

Answers

$$\begin{aligned}
 1) \quad & 0.603\overline{58} \\
 & f = 0.603\overline{58} \\
 & 100,000f = 60358.\overline{58} \\
 & - \quad 1,000f = 00603.\overline{58} \\
 \hline
 & 99000f = 59755 \\
 & f = \frac{59755}{99000}
 \end{aligned}$$

$$\begin{aligned}
 2) \quad & 0.5\overline{22} \\
 & f = 0.5\overline{22} \\
 & 1,000f = 522.\overline{22} \\
 & - \quad 10f = 005.\overline{22} \\
 \hline
 & 990f = 517 \\
 & f = \frac{517}{990}
 \end{aligned}$$

$$\begin{aligned}
 3) \quad & 0.685\overline{7} \\
 & f = 0.685\overline{7} \\
 & 10,000f = 6857.\overline{7} \\
 & - \quad 1,000f = 0685.\overline{7} \\
 \hline
 & 9000f = 6172 \\
 & f = \frac{6172}{9000}
 \end{aligned}$$

$$\begin{aligned}
 4) \quad & 68.74\overline{9} \\
 & f = 68.74\overline{9} \\
 & 1,000f = 68749.\overline{49} \\
 & - \quad 10f = 00687.\overline{49} \\
 \hline
 & 990f = 68062 \\
 & f = \frac{68062}{990}
 \end{aligned}$$

$$\begin{aligned}
 5) \quad & 97.1\overline{6} \\
 & f = 97.1\overline{6} \\
 & 100f = 9716.\overline{6} \\
 & - \quad 10f = 0971.\overline{6} \\
 \hline
 & 90f = 8745 \\
 & f = \frac{8745}{90}
 \end{aligned}$$

$$\begin{aligned}
 6) \quad & 6.544\overline{7} \\
 & f = 6.544\overline{7} \\
 & 10,000f = 65447.\overline{47} \\
 & - \quad 100f = 00654.\overline{47} \\
 \hline
 & 9900f = 64793 \\
 & f = \frac{64793}{9900}
 \end{aligned}$$

$$\begin{aligned}
 7) \quad & 7.333\overline{1} \\
 & f = 7.333\overline{1} \\
 & 10,000f = 73331.\overline{1} \\
 & - \quad 1,000f = 07333.\overline{1} \\
 \hline
 & 9000f = 65998 \\
 & f = \frac{65998}{9000}
 \end{aligned}$$

$$\begin{aligned}
 8) \quad & 1.7845\overline{6} \\
 & f = 1.7845\overline{6} \\
 & 100,000f = 178456.\overline{56} \\
 & - \quad 1,000f = 001784.\overline{56} \\
 \hline
 & 99000f = 176672 \\
 & f = \frac{176672}{99000}
 \end{aligned}$$

$$\begin{aligned}
 9) \quad & 0.734\overline{9} \\
 & f = 0.734\overline{9} \\
 & 10,000f = 7349.\overline{49} \\
 & - \quad 100f = 0073.\overline{49} \\
 \hline
 & 9900f = 7276 \\
 & f = \frac{7276}{9900}
 \end{aligned}$$

$$\begin{aligned}
 10) \quad & 1.94\overline{8} \\
 & f = 1.94\overline{8} \\
 & 1,000f = 1948.\overline{48} \\
 & - \quad 10f = 0019.\overline{48} \\
 \hline
 & 990f = 1929 \\
 & f = \frac{1929}{990}
 \end{aligned}$$

1. $\frac{59755}{99000}$
2. $\frac{517}{990}$
3. $\frac{6172}{9000}$
4. $\frac{68062}{990}$
5. $\frac{8745}{90}$
6. $\frac{64793}{9900}$
7. $\frac{65998}{9000}$
8. $\frac{176672}{99000}$
9. $\frac{7276}{9900}$
10. $\frac{1929}{990}$