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

1) $6.2\overline{9}$

2) $0.75\overline{2}$

3) $0.393\overline{2}$

4) $68.4\overline{33}$

5) $6.48\overline{39}$

6) $21.7\overline{8}$

7) $3.530\overline{9}$

8) $1.837\overline{79}$

9) $7.92\overline{8}$

10) $3.7\overline{30}$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0

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

1) $6.2\overline{9}$

$f = 6.2\overline{9}$

$100f = 629.\overline{9}$

$-\ 10f = 063.\overline{9}$

$90f = 567$

$f = {}^{567}/_{90}$

2) $0.75\overline{2}$

$f = 0.75\overline{2}$

$1{,}000f = 752.\overline{2}$

$-\ 100f = 075.\overline{2}$

$900f = 677$

$f = {}^{677}/_{900}$

3) $0.393\overline{2}$

$f = 0.393\overline{2}$

$10{,}000f = 3932.\overline{2}$

$-\ 1{,}000f = 0393.\overline{2}$

$9000f = 3539$

$f = {}^{3539}/_{9000}$

4) $68.4\overline{33}$

$f = 68.4\overline{33}$

$1{,}000f = 68433.\overline{33}$

$-\ 10f = 00684.\overline{33}$

$990f = 67749$

$f = {}^{67749}/_{990}$

5) $6.48\overline{39}$

$f = 6.48\overline{39}$

$10{,}000f = 64839.\overline{39}$

$-\ 100f = 00648.\overline{39}$

$9900f = 64191$

$f = {}^{64191}/_{9900}$

6) $21.7\overline{8}$

$f = 21.7\overline{8}$

$100f = 2178.\overline{8}$

$-\ 10f = 0217.\overline{8}$

$90f = 1961$

$f = {}^{1961}/_{90}$

7) $3.530\overline{9}$

$f = 3.530\overline{9}$

$10{,}000f = 35309.\overline{9}$

$-\ 1{,}000f = 03531.\overline{9}$

$9000f = 31779$

$f = {}^{31779}/_{9000}$

8) $1.8377\overline{9}$

$f = 1.8377\overline{9}$

$100{,}000f = 183779.\overline{79}$

$-\ 1{,}000f = 001837.\overline{79}$

$99000f = 181942$

$f = {}^{181942}/_{99000}$

9) $7.92\overline{8}$

$f = 7.92\overline{8}$

$1{,}000f = 7928.\overline{8}$

$-\ 100f = 0792.\overline{8}$

$900f = 7136$

$f = {}^{7136}/_{900}$

10) $3.7\overline{30}$

$f = 3.7\overline{30}$

$1{,}000f = 3730.\overline{30}$

$-\ 10f = 0037.\overline{30}$

$990f = 3693$

$f = {}^{3693}/_{990}$

Answers

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

1-10	90	80	70	60	50	40	30	20	10	0