EduSahara™ Assignment

Name : Rational Numbers and their Decimal Expansions

Chapter : Real Numbers

Grade : SSC Grade X

1. Express $\frac{1}{10}$ as a decimal correct to 1 decimal places

   (i) 1 (ii) 0.2 (iii) 0 (iv) 0.1 (v) -0.1

2. Express $\frac{37}{100}$ as a decimal correct to 2 decimal places

   (i) 0.04 (ii) 3.7 (iii) 0.37 (iv) 0.47 (v) 0.17

3. Express $\frac{123}{1000}$ as a decimal correct to 3 decimal places

   (i) 1.23 (ii) 0.012 (iii) 0.223 (iv) -0.077 (v) 0.123

4. Express $\frac{7659}{10000}$ as a decimal correct to 4 decimal places

   (i) 0.8659 (ii) 0.0766 (iii) 0.7659 (iv) 7.659 (v) 0.5659

5. 4.9 =

   (i) $\frac{49}{100}$ (ii) $\frac{49}{1000}$ (iii) $\frac{49}{10}$ (iv) 490 (v) 49

6. 9.5 =

   (i) 950 (ii) $\frac{19}{200}$ (iii) $\frac{19}{2}$ (iv) 95 (v) $\frac{19}{20}$

7. 14.85 =

   (i) $\frac{297}{200}$ (ii) 1485 (iii) $\frac{297}{2}$ (iv) $\frac{297}{2000}$ (v) $\frac{297}{20}$

8. 4.748 =

   (i) $\frac{2374}{5}$ (ii) $\frac{1187}{25000}$ (iii) $\frac{1187}{250}$ (iv) $\frac{1187}{2500}$ (v) $\frac{1187}{25}$

9. 10.5 =

   (i) 1050 (ii) $\frac{21}{200}$ (iii) $\frac{21}{2}$ (iv) 105 (v) $\frac{21}{20}$

10. 5.19 =

    (i) $\frac{519}{10}$ (ii) $\frac{519}{1000}$ (iii) $\frac{519}{10000}$ (iv) $\frac{519}{100}$ (v) 519

11. 14.69 =

(i) 1469 (ii) $\frac{1469}{10000}$ (iii) $\frac{1469}{10}$ (iv) $\frac{1469}{1000}$ (v) $\frac{1469}{100}$

12. 10.938 =

(i) $\frac{5469}{50000}$ (ii) $\frac{5469}{50}$ (iii) $\frac{5469}{5}$ (iv) $\frac{5469}{500}$ (v) $\frac{5469}{5000}$

13. Express $\frac{6}{7}$ as a decimal correct to 1 decimal places

(i) 0.7 (ii) 1.1 (iii) 0.8 (iv) 1 (v) 0.9

14. Express $\frac{10}{9}$ as a decimal correct to 2 decimal places

(i) 1.31 (ii) 1.11 (iii) 1.01 (iv) 0.91 (v) 1.21

15. Express $\frac{5}{9}$ as a decimal correct to 3 decimal places

(i) 0.556 (ii) 0.756 (iii) 0.456 (iv) 0.656 (v) 0.356

16. Express $\frac{8}{3}$ as a decimal correct to 4 decimal places

(i) 2.4667 (ii) 2.7667 (iii) 2.6667 (iv) 2.8667 (v) 2.5667

17. Express $\frac{49}{92}$ as a decimal correct to 1 decimal places

(i) 0.5 (ii) 0.3 (iii) 0.4 (iv) 0.7 (v) 0.6

18. Find the period of the recurring decimal $1.\overline{185}$

(i) 3 (ii) 185 (iii) 18 (iv) 4 (v) 1850

19. Find the period of the recurring decimal 14.11111111111111...

(i) 0 (ii) 2 (iii) 1 (iv) 10

20. Find the periodicity of the recurring decimal $25.\overline{5}$

(i) 2 (ii) -1 (iii) 0 (iv) 5 (v) 1

21. Find the periodicity of the recurring decimal 15.90476190476190...

(i) 5 (ii) 7 (iii) 4 (iv) 6 (v) 904761

22. The recurring part of the decimal $18.\overline{4}$ is

(i) 441 (ii) 18.4 (iii) 4 (iv) 444 (v) 44

23. The recurring part of the decimal 30.76190476190476... is

(i) 761904761904 (ii) 76190473 (iii) 7619047761904 (iv) 761904 (v) 30.761904

24. Convert the non-terminating recurring decimal $10.\overline{370}$ to rational number

(i) $\frac{280}{29}$ (ii) $\frac{278}{27}$ (iii) $\frac{56}{5}$ (iv) $\frac{94}{9}$ (v) $\frac{280}{27}$

25. Convert the non-terminating recurring decimal $24.44444444444444...$ to rational number

(i) $\frac{74}{3}$ (ii) $\frac{218}{9}$ (iii) $\frac{220}{9}$ (iv) $\frac{220}{7}$ (v) 20

26. Convert the fraction $\frac{1}{3}$ to non-terminating recurring decimal

(i) $0.\overline{0}$ (ii) $0.0\overline{3}$ (iii) $3.\overline{3}$ (iv) $33.\overline{3}$ (v) $0.\overline{3}$

27. Convert the fraction $\frac{259}{9}$ to non-terminating recurring decimal

(i) $2.8\overline{7}$ (ii) $28.\overline{7}$ (iii) $2877.\overline{7}$ (iv) $287.\overline{7}$ (v) $0.28\overline{7}$

28. Which of the following fractions converts to a non-terminating recurring decimal?

(i) $\frac{861}{16}$ (ii) $\frac{845}{8}$ (iii) $\frac{182}{9}$ (iv) $\frac{2156}{256}$ (v) $\frac{1690}{32}$

29. Which of the following fractions converts to a terminating decimal?

(i) $\frac{2160}{64}$ (ii) $\frac{305}{18}$ (iii) $\frac{1}{3}$ (iv) $\frac{1}{45}$ (v) $\frac{2}{57}$

30. Which of the following is an irrational number?

(i) 15 (ii) 6 (iii) $\sqrt[3]{57}$ (iv) 0.3333 (v) $\frac{3}{4}$

31. Which of the following is a rational number?

(i) $\sqrt[3]{47}$ (ii) $\sqrt[3]{35}$ (iii) $\sqrt[3]{36}$ (iv) $\frac{5}{16}$ (v) $\sqrt{50}$

32. Which of the following is a decimal fraction?

(i) $\frac{8}{10}$ (ii) $12\frac{18}{19}$ (iii) $\frac{6}{12}$ (iv) $\frac{20}{11}$ (v) $9\frac{7}{12}$

33. Which of the following is a decimal fraction?

(i) $9\frac{7}{11}$ (ii) $\frac{9}{100}$ (iii) $\frac{8}{7}$ (iv) $\frac{8}{12}$ (v) $7\frac{5}{13}$

34. Which of the following is a decimal fraction?

(i) $\frac{1}{2}$ (ii) $3\frac{6}{7}$ (iii) $\frac{4}{1000}$ (iv) $\frac{19}{4}$ (v) $16\frac{2}{19}$

35. Which of the following is a decimal fraction?

(i) $\frac{3}{8}$ (ii) $6\frac{8}{11}$ (iii) $\frac{2}{10000}$ (iv) $9\frac{9}{19}$ (v) $\frac{16}{5}$

Assignment Key

1) (iv)	2) (iii)	3) (v)	4) (iii)	5) (iii)	6) (iii)
7) (v)	8) (iii)	9) (iii)	10) (iv)	11) (v)	12) (iv)
13) (v)	14) (ii)	15) (i)	16) (iii)	17) (i)	18) (ii)
19) (iii)	20) (v)	21) (iv)	22) (iii)	23) (iv)	24) (v)
25) (iii)	26) (v)	27) (ii)	28) (iii)	29) (i)	30) (iii)
31) (iv)	32) (i)	33) (ii)	34) (iii)	35) (iii)	