EduSahara™ Assignment

Name : Recurring and Non-recurring decimals

Chapter : Decimals

Grade : ICSE Grade VII

1. Find the period of the recurring decimal $12.\overline{7}$

   (i) 0 (ii) 1 (iii) 7 (iv) 70 (v) 2

2. Find the period of the recurring decimal 9.51851851851851...

   (i) 3 (ii) 51 (iii) 5180 (iv) 518 (v) 4

3. Find the periodicity of the recurring decimal $24.\overline{476190}$

   (i) 5 (ii) 476190 (iii) 7 (iv) 6 (v) 4

4. Find the periodicity of the recurring decimal 0.33333333333333...

   (i) 1 (ii) 2 (iii) -1 (iv) 3 (v) 0

5. The recurring part of the decimal $2.\overline{2}$ is

   (i) 22 (ii) 222 (iii) 2 (iv) 2.2

6. The recurring part of the decimal 2.55555555555555... is

   (i) 552 (ii) 5 (iii) 55 (iv) 555 (v) 2.5

7. Convert the non-terminating recurring decimal $16.\overline{925}$ to rational number

   (i) 17 (ii) $\frac{457}{27}$ (iii) $\frac{455}{27}$ (iv) $\frac{457}{29}$ (v) $\frac{457}{25}$

8. Convert the non-terminating recurring decimal 30.88888888888888... to rational number

   (i) $\frac{278}{7}$ (ii) $\frac{278}{9}$ (iii) $\frac{92}{3}$ (iv) $\frac{278}{11}$ (v) $\frac{280}{9}$

9. Convert the fraction $\frac{401}{27}$ to non-terminating recurring decimal

   (i) $1.4\overline{851}$ (ii) $0.14\overline{851}$ (iii) $14.\overline{851}$ (iv) $1485.\overline{185}$ (v) $148.\overline{518}$

10. Convert the fraction $\frac{139}{9}$ to non-terminating recurring decimal

    (i) $0.15\overline{4}$ (ii) $1.5\overline{4}$ (iii) $154.\overline{4}$ (iv) $1544.\overline{4}$ (v) $15.\overline{4}$

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

    (i) $\frac{1}{3}$ (ii) $\frac{4800}{40}$ (iii) $\frac{2090}{80}$ (iv) $\frac{240}{1}$ (v) $\frac{121}{1}$

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

(i) $\frac{265}{252}$ (ii) $\frac{2464}{80}$ (iii) $\frac{265}{162}$ (iv) $\frac{265}{18}$ (v) $\frac{115}{9}$

13. Which of the following is a pure recurring decimal?

(i) 0.43333333333333... (ii) 13.61111111111111... (iii) 28.27777777777777... (iv) 16.05555555555555...

(v) 14.92592592592592...

14. Which of the following is a mixed recurring decimal?

(i) 14.27777777777777... (ii) 21.11111111111111... (iii) 19.37037037037037...

(iv) 14.52380952380952... (v) 19.80952380952381...

15. Find the period of the recurring decimal $10.\overline{8}$

(i) 2 (ii) 0 (iii) 1 (iv) 8 (v) 80

16. Find the period of the recurring decimal 16.55555555555555...

(i) 1 (ii) 2 (iii) 50 (iv) 0 (v) 5

17. Find the periodicity of the recurring decimal $1.\overline{5}$

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

18. Find the periodicity of the recurring decimal 29.77777777777777...

(i) 2 (ii) -1 (iii) 1 (iv) 7 (v) 0

19. The recurring part of the decimal $30.\overline{7}$ is

(i) 777 (ii) 773 (iii) 77 (iv) 30.7 (v) 7

20. The recurring part of the decimal 18.77777777777777... is

(i) 77 (ii) 7 (iii) 777 (iv) 771 (v) 18.7

21. Convert the non-terminating recurring decimal $2.6\overline{1}$ to rational number

(i) $\frac{5}{2}$ (ii) $\frac{47}{18}$ (iii) $\frac{47}{20}$ (iv) $\frac{49}{18}$ (v) $\frac{47}{16}$

22. Convert the non-terminating recurring decimal 12.47619047619047...
to rational number

(i) $\frac{260}{21}$ (ii) $\frac{262}{21}$ (iii) $\frac{88}{7}$ (iv) $\frac{262}{23}$ (v) $\frac{262}{19}$

23. Convert the fraction $\frac{10}{9}$ to non-terminating recurring decimal

(i) $11.\overline{1}$ (ii) $0.\overline{1}$ (iii) $111.\overline{1}$ (iv) $0.0\overline{1}$ (v) $1.\overline{1}$

24. Convert the fraction $\frac{151}{18}$ to non-terminating recurring decimal

(i) $838.\overline{8}$ (ii) $0.0\overline{8}$ (iii) $0.\overline{8}$ (iv) $83.\overline{8}$ (v) $8.3\overline{8}$

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

(i) $\frac{171}{4}$ (ii) $\frac{1}{3}$ (iii) $\frac{3420}{160}$ (iv) $\frac{179}{8}$ (v) $\frac{4180}{40}$

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

(i) $\frac{1}{51}$ (ii) $\frac{1}{27}$ (iii) $\frac{2520}{20}$ (iv) $\frac{1}{3}$

27. Which of the following is a pure recurring decimal?

(i) 11.38888888888888... (ii) 9.27777777777777... (iii) 30.77777777777777... (iv) 26.72222222222222...

(v) 20.94444444444444...

28. Which of the following is a mixed recurring decimal?

(i) 0.43333333333333... (ii) 13.77777777777777... (iii) 1.88888888888888... (iv) 23.80952380952381...

(v) 15.88888888888888...

Assignment Key

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