

EduSahara™ Learning Center Assignment**Grade : Class IX, CBSE****Chapter : Number Systems****Name : Rational Numbers and their Decimal Expansions**

1. The recurring part of the decimal $23.\overline{8}$ is

(i) 88 (ii) 8 (iii) 888 (iv) 23.8 (v) 882

2. The recurring part of the decimal 6.18518518518518... is

(i) 185 (ii) 185185 (iii) 6.185 (iv) 18516 (v) 1851185

3. Convert the non-terminating recurring decimal $13.\overline{952380}$ to rational number

(i) $\frac{293}{23}$ (ii) $\frac{293}{21}$ (iii) $\frac{97}{7}$ (iv) $\frac{293}{19}$ (v) $\frac{295}{21}$

4. Convert the non-terminating recurring decimal $19.94444444444444...$ to rational number

(i) $\frac{119}{6}$ (ii) $\frac{359}{20}$ (iii) $\frac{359}{16}$ (iv) $\frac{361}{18}$ (v) $\frac{359}{18}$

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

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

6. Convert the fraction $\frac{277}{9}$ to non-terminating recurring decimal

(i) $3077.\overline{7}$ (ii) $307.\overline{7}$ (iii) $0.30\overline{7}$ (iv) $3.0\overline{7}$ (v) $30.\overline{7}$

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

(i) $\frac{651}{5}$ (ii) $\frac{2380}{40}$ (iii) $\frac{1292}{5}$ (iv) $\frac{5168}{40}$ (v) $\frac{1}{3}$

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

(i) $\frac{1}{3}$ (ii) $\frac{1}{33}$ (iii) $\frac{161}{9}$ (iv) $\frac{3762}{256}$ (v) $\frac{1}{24}$

9. Which of the following is an irrational number?

(i) $\sqrt[3]{93}$ (ii) (-1) (iii) 5.2222 (iv) 10 (v) $\frac{1}{5}$

10. Which of the following is a rational number?

(i) $\sqrt{59}$ (ii) $\frac{1}{8}$ (iii) $\sqrt[3]{17}$ (iv) $\sqrt{22}$ (v) $\sqrt[3]{97}$

11. Express $\frac{9}{10}$ as a decimal correct to 1 decimal places

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

12. Express $\frac{79}{100}$ as a decimal correct to 2 decimal places

(i) 0.69 (ii) 0.79 (iii) 0.59 (iv) 0.99 (v) 0.89

13. Express $\frac{389}{1000}$ as a decimal correct to 3 decimal places

(i) 0.389 (ii) 0.289 (iii) 0.589 (iv) 0.189 (v) 0.489

14. Express $\frac{7979}{10000}$ as a decimal correct to 4 decimal places

(i) 0.6979 (ii) 0.9979 (iii) 0.5979 (iv) 0.8979 (v) 0.7979

15. $2.8 =$

(i) $\frac{7}{25}$ (ii) $\frac{7}{250}$ (iii) 280 (iv) $\frac{14}{5}$ (v) 28

16. $10.7 =$

(i) $\frac{107}{1000}$ (ii) 1070 (iii) 107 (iv) $\frac{107}{10}$ (v) $\frac{107}{100}$

17. $19.67 =$

(i) $\frac{1967}{10000}$ (ii) $\frac{1967}{10}$ (iii) 1967 (iv) $\frac{1967}{100}$ (v) $\frac{1967}{1000}$

18. $4.592 =$

(i) $\frac{1148}{25}$ (ii) $\frac{287}{6250}$ (iii) $\frac{287}{625}$ (iv) $\frac{574}{125}$ (v) $\frac{2296}{5}$

19. $2.7 =$

(i) 270 (ii) 27 (iii) $\frac{27}{10}$ (iv) $\frac{27}{100}$ (v) $\frac{27}{1000}$

20. $6.18 =$

(i) $\frac{309}{500}$ (ii) $\frac{309}{5}$ (iii) $\frac{309}{50}$ (iv) 618 (v) $\frac{309}{5000}$

21. $19.26 =$

(i) $\frac{963}{5}$ (ii) 1926 (iii) $\frac{963}{50}$ (iv) $\frac{963}{5000}$ (v) $\frac{963}{500}$

22.

$$8.900 =$$

- (i) 890 (ii) $\frac{89}{10}$ (iii) 89 (iv) $\frac{89}{100}$ (v) $\frac{89}{1000}$
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23. Which of the following symbols represent the set of Natural numbers ?

- (i) N (ii) W (iii) Q' (iv) R (v) Z
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24. Which of the following symbols represent the set of Whole numbers ?

- (i) N (ii) R (iii) Z (iv) W (v) Q'
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25. Which of the following symbols represent the set of Integers ?

- (i) Z (ii) R (iii) W (iv) Q' (v) N
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26. Which of the following symbols represent the set of Rational numbers ?

- (i) Q' (ii) Z (iii) Q (iv) N (v) W
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27. Which of the following symbols represent the set of Irrational numbers ?

- (i) Q' (ii) Q (iii) N (iv) R (v) W
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28. Which of the following symbols represent the set of Real numbers ?

- (i) N (ii) W (iii) R (iv) Z (v) Q'
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Assignment Key

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