EduSahara™ Learning Center Assignment

Grade : Class IX, ICSE
Chapter : Rational and Irrational Numbers
Name : Rational Numbers and their Decimal Expansions

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1. Express $\frac{3}{10}$ as a decimal correct to 1 decimal places

   (i) 0.4 (ii) 0.3 (iii) 0.5 (iv) 0.1 (v) 0.2

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2. Express $\frac{97}{100}$ as a decimal correct to 2 decimal places

   (i) 0.87 (ii) 0.77 (iii) 0.97 (iv) 1.07 (v) 1.17

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3. Express $\frac{421}{1000}$ as a decimal correct to 3 decimal places

   (i) 0.521 (ii) 0.221 (iii) 0.421 (iv) 0.321 (v) 0.621

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4. Express $\frac{2843}{10000}$ as a decimal correct to 4 decimal places

   (i) 0.0843 (ii) 0.3843 (iii) 0.1843 (iv) 0.4843 (v) 0.2843

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5. 4.8 =

   (i) 480 (ii) $\frac{24}{5}$ (iii) $\frac{6}{125}$ (iv) 48 (v) $\frac{12}{25}$

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6. 3.9 =

   (i) $\frac{39}{10}$ (ii) 39 (iii) 390 (iv) $\frac{39}{1000}$ (v) $\frac{39}{100}$

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7. 7.81 =

   (i) $\frac{781}{1000}$ (ii) $\frac{781}{100}$ (iii) 781 (iv) $\frac{781}{10000}$ (v) $\frac{781}{10}$

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8. 1.339 =

   (i) $\frac{1339}{100000}$ (ii) $\frac{1339}{100}$ (iii) $\frac{1339}{1000}$ (iv) $\frac{1339}{10000}$ (v) $\frac{1339}{10}$

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9. 7.7 =

   (i) 77 (ii) $\frac{77}{100}$ (iii) $\frac{77}{10}$ (iv) $\frac{77}{1000}$ (v) 770

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10. 6.14 =

    (i) $\frac{307}{50}$ (ii) $\frac{307}{5000}$ (iii) $\frac{307}{5}$ (iv) 614 (v) $\frac{307}{500}$

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11. 2.59 =

    (i) $\frac{259}{1000}$ (ii) 259 (iii) $\frac{259}{10000}$ (iv) $\frac{259}{100}$ (v) $\frac{259}{10}$

1000 10000 100 10

12. 3.468 =

(i) $\frac{1734}{5}$ (ii) $\frac{867}{25000}$ (iii) $\frac{867}{25}$ (iv) $\frac{867}{2500}$ (v) $\frac{867}{250}$

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13. The recurring part of the decimal $14.7\overline{2}$ is

(i) 221 (ii) 22 (iii) 2 (iv) 272 (v) 14.72

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14. The recurring part of the decimal 14.09523809523809... is

(i) 095238 (ii) 14.095238 (iii) 09523801

(iv) 095238095238 (v) 0952380095238

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15. Convert the non-terminating recurring decimal $6.\overline{370}$ to rational number

(i) $\frac{172}{27}$ (ii) $\frac{170}{27}$ (iii) $\frac{172}{29}$ (iv) $\frac{58}{9}$ (v) $\frac{172}{25}$

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16. Convert the non-terminating recurring decimal 7.77777777777777... to rational number

(i) $\frac{70}{9}$ (ii) $\frac{70}{11}$ (iii) $\frac{68}{9}$ (iv) 10 (v) 8

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17. Convert the fraction $\frac{341}{21}$ to non-terminating recurring decimal

(i) $0.16\overline{238095}$ (ii) $1.6\overline{238095}$ (iii) $16.\overline{238095}$ (iv) $1623.\overline{809523}$ (v) $162.\overline{380952}$

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18. Convert the fraction $\frac{245}{9}$ to non-terminating recurring decimal

(i) $0.\overline{2}$ (ii) $2.7\overline{2}$ (iii) $27.\overline{2}$ (iv) $272.\overline{2}$ (v) $2722.\overline{2}$

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

(i) $\frac{64}{1}$ (ii) $\frac{7600}{128}$ (iii) $\frac{126}{1}$ (iv) $\frac{149}{9}$ (v) $\frac{2520}{40}$

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

(i) $\frac{209}{18}$ (ii) $\frac{209}{144}$ (iii) $\frac{19}{18}$ (iv) $\frac{1540}{160}$ (v) $\frac{211}{18}$

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

(i) 0.03333333333333...

(ii) 0.14444444444444...

(iii) 0.22222222222222...

(iv) 0.75555555555555...

(v) 8.22222222222222...

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

(i) 22.55555555555555...

(ii) 0.15555555555555...

(iii) 9.61904761904761...

(iv) 15.22222222222222...

(v) 13.81481481481481...

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23. Express $\frac{3}{2}$ as a decimal correct to 2 decimal places

(i) 1.3 (ii) 1.5 (iii) 1.7 (iv) 1.6 (v) 1.4

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24. Express $\frac{15}{16}$ as a decimal correct to 2 decimal places

(i) 0.74 (ii) 0.94 (iii) 0.84 (iv) 1.14 (v) 1.04

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25. Express $\frac{16}{5}$ as a decimal correct to 2 decimal places

(i) 3.1 (ii) 3 (iii) 3.3 (iv) 3.4 (v) 3.2

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26. Express $\frac{13}{19}$ as a decimal correct to 2 decimal places

(i) 0.68 (ii) 0.88 (iii) 0.58 (iv) 0.78 (v) 0.48

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

(i) -0.1 (ii) 0.3 (iii) 0 (iv) 0.1 (v) 0.2

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28. Express $\frac{10}{7}$ as a decimal correct to 2 decimal places

(i) 1.43 (ii) 1.63 (iii) 1.33 (iv) 1.23 (v) 1.53

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29. Express $\frac{2}{3}$ as a decimal correct to 3 decimal places

(i) 0.867 (ii) 0.567 (iii) 0.667 (iv) 0.767 (v) 0.467

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30. Express $\frac{3}{10}$ as a decimal correct to 4 decimal places

(i) 0.1 (ii) 0.3 (iii) 0.2 (iv) 0.5 (v) 0.4

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31. Express $\frac{91}{62}$ as a decimal correct to 1 decimal places

(i) 1.7 (ii) 1.6 (iii) 1.3 (iv) 1.5 (v) 1.4

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32. Express $\frac{59}{41}$ as a decimal correct to 2 decimal places

(i) 1.34 (ii) 1.54 (iii) 1.24 (iv) 1.44 (v) 1.64

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33. Express $\frac{61}{52}$ as a decimal correct to 3 decimal places

(i) 1.073 (ii) 1.373 (iii) 1.173 (iv) 0.973 (v) 1.273

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34. Express $\frac{67}{70}$ as a decimal correct to 4 decimal places

(i) 0.8571 (ii) 0.7571 (iii) 1.0571 (iv) 0.9571 (v) 1.1571

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35. Express $\frac{51}{958}$ as a decimal correct to 3 decimal places

(i) 0.153 (ii) 0.253 (iii) 0.053 (iv) -0.147 (v) -0.047

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36. Express $\frac{7575}{2387}$ as a decimal correct to 4 decimal places

(i) 3.2734 (ii) 2.9734 (iii) 3.1734 (iv) 3.0734 (v) 3.3734

Assignment Key

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