

DECIMALS

Class: VII, Mathematics

①

TEACHING TASK

Solutions

01. 1.425

$$7.38$$

$$\hline 8.805$$

Ans: A

02. $\frac{0.75}{0.5} = \frac{75}{50} = \frac{15}{10} = 1.5$

Ans: B

03. $2.7 - (0.9 + 1.3)$

$$= 2.7 - 2.2$$

$$= 0.5$$

Ans: B

04. $0.625 = \frac{625}{1000} = \frac{25}{40} = \frac{5}{8}$

Ans: A

05. $1.2 \times (0.6 + 0.3)$

$$= 1.2 \times 0.9$$

$$= 1.08$$

Ans: —

06. $1.2 - 0.95$

$$= 0.25$$

Ans: A

07. $\frac{50}{100} = 0.5$

Ans: C

08. $1.63 \times 6.3 = 10.269$

Ans: C

09. $\frac{1}{8} = 0.125$

Ans: B



10.

$$21.114$$

$$14.280$$

$$\hline 6.834$$

②

Ans: C

11

$$\frac{1}{3600} = 0.00027$$

Ans: A

12

$$\frac{36}{100} = \frac{9}{25}$$

$$\text{Ans: } 25 - 9 = 16$$

Ans: C

13

$$3 \times 0.3 \times 0.03 \times 0.003 \times 30$$

$$= 0.002430$$

Ans: C

14

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$\Rightarrow 45.8 = \frac{\text{Distance}}{6}$$

$$\Rightarrow \text{Distance} = 274.8 \text{ Km}$$

Ans: C

15

$$0.3 \times 0.008 = 0.0024$$

Ans: C

ADVANCED LEVEL

01

$$3.1416 = 3.1416 \times 10^0$$

$$= 314.16 \times 10^{-2} = 31.416 \times 10^{-1}$$

Ans: A
B, C

02

$$87.349, 765.047, 9.546$$

Ans: B, C, D

03

$$0.3 - 0.03 = 0.27$$

Ans: B

04

$$1.25 - 0.75 = 0.50$$

Ans: A

05

$$63.694, 43.492$$

Ans: C

06

$$22.789, 8.9$$

Ans: A

07 Statement I: $12.78 \sim 12.8$ (True) (3)

Statement II: (Conceptual) True Ans: A

08 Statement I: Conceptual true

Statement II: True Ans: A

09 $15.239 \sim 14$

Ans: 14

10 49×10^8

Ans: 8

11. 0.7×0.25

$$= \frac{7}{10} \times \frac{25}{100} = \frac{175}{1000} = 0.175$$

12 $2.333 \dots = \frac{1}{3}$

13 a) $3.1416 \sim 3.14$

$$b) 7.895 \times 10^{-4} = \frac{7895}{1000} \times 10^{-4}$$

$$= \frac{7895}{10000000}$$

$$= 0.0007895$$

c)

$$c) \frac{5}{8} = 0.625$$

$$d) 0.25 = \frac{25}{100} = \frac{1}{4}$$

Ans: 8, 9, P, S

14. a) ~~$3.1416 \approx 3.14$~~
 b) 7.

14 a) $20 + 3 + 0.7 + 0.05 + 0.008$

(4)

$= 23.758$

b) Non-terminating = $827.7973 \dots$

c) recurring = $573.636363 \dots$

d) $14.62 + 12.63 - 25.25 = 2$

Ans: t, p, s, r

LEARNERS TASK

CUQ'S

01. $\frac{2}{10} = 0.2$

Ans: A

02. 0.25

Ans: C

03. $0.6 + 0.45 = 1.05$

Ans: A

04. terminating decimal = a rational no.

Ans: C

05. $\frac{75}{100} = 0.75$

Ans: D

06. 75.75×0.2554

$= \frac{7575}{100} \times \frac{2554}{10000}$

$= 19.34655$

Ans: 5

Ans: C



07 $\frac{25}{0.0005} = \frac{25}{5} \times 10000$ ⑤
 $= 5 \times 10000$
 $= 50000$ Ans: D

08 $\frac{40}{1000} = 0.04$ Ans: B

09 $\frac{32.35}{100} = \frac{3235}{100} =$ Ans: A

10 $400 + 20 + \frac{2}{10} + \frac{3}{100} + \frac{5}{1000}$
 $= 400 + 20 + 0.2 + 0.03 + 0.005$
 $= 420.235$ Ans: A

11 $102 \times 0.22 = 22.44$ Ans: B

12 $\frac{0.0098}{0.28} = 0.035$ Ans: D

13 0.87, 0.15 are terminating decimals
 0.86666..., 0.8333... are non-terminating decimals
Ans: —

07 $\frac{25}{0.0005} = \frac{25}{5} \times 10000$ (5)
 $= 5 \times 10000$
 $= 50000$ Ans: D

08 $\frac{40}{1000} = 0.04$ Ans: B

09 $\frac{32.35}{100} = \frac{3235}{100} =$ Ans: A

10 $400 + 20 + \frac{2}{10} + \frac{3}{100} + \frac{5}{1000}$
 $= 400 + 20 + 0.2 + 0.03 + 0.005$
 $= 420.235$ Ans: A

11 $102 \times 0.22 = 22.44$ Ans: B

12 $\frac{0.0098}{0.28} = 0.035$ Ans: D

13 0.87, 0.15 are terminating decimals
 0.86666..., 0.8333... are non-terminating decimals
 Ans: —

JEE MAINS LEVEL QUESTIONS

01. $9275 \text{ m} = \frac{9275}{1000} \text{ km} = 9.275 \text{ km}$ Ans: D

02 $9\frac{7}{20} = 9.35$ Ans: D

03 $\frac{0.46 - 0.046}{0.046 \div 4.6} = \frac{0.414}{\left(\frac{1}{100}\right)} = 0.414 \times 100 = 41.4$ Ans: C

(6)

03

$$04 \quad 5.4 + x = 20.9$$

$$\Rightarrow x = 20.9 - 5.4$$

$$\Rightarrow x = 15.5$$

Ans: A

$$05 \quad 22.356 - 131.6 + 23.5 + 689.4$$

$$= (22.356 + 23.5 + 689.4) - 131.6$$

$$= 735.256 - 131.6$$

$$= 603.656$$

Ans: B

$$06 \quad \text{let the other number be } x$$

$$: \quad x \times 2.1 = 42.63$$

$$\Rightarrow x = \frac{42.63}{2.1}$$

$$\Rightarrow x = 20.3$$

Ans: C

$$07 \quad 8 \times 3.35 = 26.80$$

Ans: C

$$08 \quad 218.99 + 109.85 = 328.84 \text{ kg}$$

Ans: D

$$09 \quad 39.45 - 28.47 = 10.98$$

Ans: B

$$10 \quad 18.35 \times 1.2 = 22.02$$

Ans: C

$$11 \quad 2.4x - 0.6 = 1.8$$

$$\Rightarrow 2.4x = 1.8 + 0.6$$

$$\Rightarrow 2.4x = 2.4$$

$$\Rightarrow x = 1$$

Ans: —

$$12 \quad 0.3 \times 0.4 = 0.12$$

Ans: A

$$13. \quad 0.2 + 3x = 1.1$$

$$\Rightarrow 3x = 1.1 - 0.2$$

$$\Rightarrow 3x = 0.9$$

$$\Rightarrow x = 0.3$$

Ans: A



ADVANCED LEVEL QUESTIONS (7)

01. $0.6 \times 0.4 + 0.25 = 0.24 + 0.25$
 $= 0.49$

Ans: —

02. All are in scientific notation form Ans: A, B, C, D

03. $3.5 = 3.50$ | $15.6 = 15.60$
 $0.67 = 0.67$ | $40 = 40.00$ Ans: B

04. total volume = $1.25 + 0.75 + 0.5 + \cancel{0.25}$
 $= 2.50$ cups

05. $2 \times 0.25 = 0.5$ teaspoons Ans: B

06. 0.8 of the total mixture Ans: B

07. Statement I: $1.2 + 0.75 = 1.95$ miles (true)

Statement II: (conceptual) true Ans: A

08. $0.15 + 0.35 = 0.5$ Ans: 0.5

09. $x = \frac{129.5}{18.5} = 7$ Ans: 7

10. $0.6 \times 0.4 = 0.24$ Ans: 0.24

11. a) $367.80 \times 6 = 2206.8$

b) $234.28 + 43.492 = 277.772$

c) $81.2 \div 32 = 2.5375$

d) $(223.32 - 321.29) + 41.7 = 543.73$

⇒ THE END ⇐ Ans: x, p, s, v