

Decimals

Exercise 7A

Q1

Answer :

- (i) 58.63
- (ii) 124.425
- (iii) 7.76
- (iv) 19.8
- (v) 404.044
- (vi) 0.173
- (vii) 0.015

Q2

Answer :

(i) In 14.83, we have:

Place value of 1 = 1 tens = 10

Place value of 4 = 4 ones = 4

Place value of 8 = 8 tenths = $\frac{8}{10}$

Place value of 3 = 3 hundredths = $\frac{3}{100}$

(ii) In 275.269, we have:

Place value of 2 = 2 hundreds = 200

Place value of 7 = 7 tens = 70

Place value of 5 = 5 ones = 5

Place value of 2 = 2 tenths = $\frac{2}{10}$

Place value of 6 = 6 hundredths = $\frac{6}{100}$

Place value of 9 = 9 thousandths = $\frac{9}{1000}$

(iii) In 46.075, we have:

Place value of 4 = 4 tens = 40

Place value of 6 = 6 ones = 6

Place value of 0 = 0 tenths = $\frac{0}{10} = 0$

Place value of 7 = 7 hundredths = $\frac{7}{100}$

Place value of 5 = 5 thousandths = $\frac{5}{1000}$

(iv) In 302.459, we have:

Place value of 3 = 3 hundreds = 300

Place value of 0 = 0 tens = 0

Place value of 2 = 2 ones = 2

Place value of 4 = 4 tenths = $\frac{4}{10}$

Place value of 5 = 5 hundredths = $\frac{5}{100}$

Place value of 9 = 9 thousandths = $\frac{9}{1000}$

(v) In 5370.34, we have:

Place value of 5 = 5 thousands = 5000

Place value of 3 = 3 hundreds = 300

Place value of 7 = 7 tens = 70

Place value of 0 = 0 ones = 0

Place value of 3 = 3 tenths = $\frac{3}{10}$

Place value of 4 = 4 hundredths = $\frac{4}{100}$

(vi) In 186.209, we have:

Place value of 1 = 1 hundreds = 100

Place value of 8 = 8 tens = 80

Place value of 6 = 6 ones = 6

Place value of 2 = 2 tenths = $\frac{2}{10}$

Place value of 0 = 0 hundredths = 0

Place value of 9 = 9 thousandths = $\frac{9}{1000}$

Q3

Answer :

(i) 67.83

= 6 tens + 7 ones + 8 tenths + 3 hundredths

$$= 60 + 7 + \frac{8}{10} + \frac{3}{100}$$

(ii) 283.61

= 2 hundreds + 8 tens + 3 ones + 6 tenths + 1 hundredths

$$= 200 + 80 + 3 + \frac{6}{10} + \frac{1}{100}$$

(iii) 24.675

= 2 tens + 4 ones + 6 tenths + 7 hundredths + 5 thousandths

$$= 20 + 4 + \frac{6}{10} + \frac{7}{100} + \frac{5}{1000}$$

(iv) 0.294

= 2 tenths + 9 hundredths + 4 thousandths

$$= \frac{2}{10} + \frac{9}{100} + \frac{4}{1000}$$

(v) 8.006

= 8 ones + 0 tenths + 0 hundredths + 6 thousandths

$$= 8 + \frac{0}{10} + \frac{0}{100} + \frac{6}{1000}$$

(vi) 4615.72

= 4 thousands + 6 hundreds + 1 tens + 5 ones + 7 tenths + 2 hundredths

$$= 4000 + 600 + 10 + 5 + \frac{7}{10} + \frac{2}{100}$$

Q4

Answer :

$$(i) 40 + 6 + \frac{7}{10} + \frac{9}{100} = 46 + 0.7 + .09 = 46.79$$

$$(ii) 500 + 70 + 8 + \frac{3}{10} + \frac{1}{100} + \frac{6}{1000} = 578 + 0.3 + 0.01 + 0.006 = 578.316$$

$$(iii) 700 + 30 + 1 + \frac{8}{10} + \frac{4}{100} = 731 + 0.8 + 0.04 = 731.84$$

$$(iv) 600 + 5 + \frac{7}{100} + \frac{9}{1000} = 605 + 0.07 + 0.009 = 605.079$$

$$(v) 800 + 5 + \frac{8}{10} + \frac{6}{1000} = 805 + 0.8 + 0.006 = 805.806$$

$$(vi) 30 + 9 + \frac{4}{100} + \frac{8}{1000} = 39 + 0.04 + 0.008 = 39.048$$

Q5

Answer :

(i) Each of the numbers has maximum 3 decimal places. So, we convert them into numbers having three decimal places by annexing suitable number of zeroes to the extreme right of the decimal part.

$$7.5 = 7.500$$

$$64.23 = 64.230$$

$$0.074 = 0.074$$

(ii) Each of the numbers has maximum 3 decimal places. So, we convert them into numbers having three decimal places by annexing suitable number of zeroes to the extreme right of the decimal part.

$$0.6 = 0.600$$

$$5.937 = 5.937$$

$$2.36 = 2.360$$

$$4.2 = 4.200$$

(iii) Each of the numbers has maximum 2 decimal places. So, we convert them into numbers having three decimal places by annexing suitable number of zeroes to the extreme right of the decimal part.

$$1.6 = 1.60$$

$$0.07 = 0.07$$

$$3.58 = 3.58$$

$$2.9 = 2.90$$

(iv) Each of the numbers has maximum 3 decimal places. So, we convert them into numbers having three decimal places by annexing suitable number of zeroes to the extreme right of the decimal part.

$$2.5 = 2.500$$

$$0.63 = 0.630$$

$$14.08 = 14.080$$

$$1.637 = 1.637$$

Q6

Answer :

$$(i) 84.23 > 76.35$$

Since 84 is greater than 76, 84.23 is greater than 76.35. (Comparing the whole number parts)

$$(ii) 7.608 < 7.680$$

Since 8 is greater than 0 at the hundredths place, 7.608 is smaller than 7.680.

$$(iii) 8.34 < 8.43$$

Since 4 is greater than 3 at the tenths place, 8.34 is smaller than 8.43.

$$(iv) 12.06 > 12.006$$

Since 6 is greater than 0 at the hundredths place, 12.06 is greater than 12.006.

$$(v) 3.850 > 3.805$$

Since 5 is greater than 0 at the hundredths place, 3.850 is greater than 3.805.

$$(vi) 0.97 < 1.07$$

Since 1 is greater than 0, 0.97 is smaller than 1.07. (Comparing the whole number parts)

Q7

Answer :

$$(i) 5.8, 7.2, 5.69, 7.14, 5.06$$

Converting the given decimals into like decimals:

$$5.80, 7.20, 5.69, 7.14, 5.06$$

$$\text{Clearly, } 5.06 < 5.69 < 5.80 < 7.14 < 7.20$$

Hence, the given decimals can be arranged in the ascending order as follows:

$$5.06, 5.69, 5.80, 7.14 \text{ and } 7.2$$

$$(ii) 0.6, 6.6, 6.06, 66.6, 0.06$$

Converting the given decimals into like decimals:

$$0.60, 6.60, 6.06, 66.60, 0.06$$

$$\text{Clearly, } 0.06 < 0.60 < 6.06 < 6.60 < 66.60$$

Hence, the given decimals can be arranged in the ascending order as follows:

$$0.06, 0.60, 6.06, 6.60 \text{ and } 66.60$$

(iii) 6.54, 6.45, 6.4, 6.5, 6.05

Converting the given decimals into like decimals:

6.54, 6.45, 6.40, 6.50, 6.05

Clearly, $6.05 < 6.40 < 6.45 < 6.50 < 6.54$

Hence, the given decimals can be arranged in the ascending order as follows:

6.05, 6.40, 6.45, 6.50 and 6.54

(iv) 3.3, 3.303, 3.033, 0.33, 3.003

Converting the given decimals into like decimals:

3.300, 3.303, 3.033, 0.330, 3.003

Clearly, $0.330 < 3.003 < 3.033 < 3.300 < 3.303$

Hence, the given decimals can be arranged in the ascending order as follows:

0.33, 3.003, 3.033, 3.300 and 3.303

Q8

Answer :

(i) 7.3, 8.73, 73.03, 7.33, 8.073

Converting each decimal into like decimals:

7.300, 8.730, 73.030, 7.330, 8.073

Clearly, $73.030 > 8.730 > 8.073 > 7.330 > 7.300$

Hence, the given decimals can be arranged in the descending order as follows:

73.03, 8.73, 8.073, 7.33 and 7.3

(ii) 3.3, 3.03, 30.3, 30.03, 3.003

Converting each decimal into like decimals:

3.300, 3.030, 30.300, 30.030, 3.003

Clearly, $30.300 > 30.030 > 3.300 > 3.030 > 3.003$

Hence, the given decimals can be arranged in the descending order as follows:

30.3, 30.03, 3.3, 3.03 and 3.003

(iii) 2.7, 7.2, 2.27, 2.72, 2.02, 2.007

Converting each decimal into like decimals:

2.700, 7.200, 2.270, 2.720, 2.020, 2.007

Clearly, $7.200 > 2.720 > 2.700 > 2.270 > 2.020 > 2.007$

Hence, the given decimals can be arranged in the descending order as follows:

7.2, 2.72, 2.7, 2.27, 2.02 and 2.007

(iv) 8.88, 8.088, 88.8, 88.08, 8.008

Converting each decimal into like decimals:

8.880, 8.088, 88.800, 88.080, 8.008

Clearly, $88.800 > 88.080 > 8.880 > 8.088 > 8.008$

Hence, the given decimals can be arranged in the descending order as follows:

88.8, 88.08, 8.88, 8.088 and 8.008

Decimals

Exercise 7B

Q1

Answer :

We have:

$$.9 = \frac{9}{10}$$

Q2

Answer :

We have:

$$0.6 = \frac{6}{10} = \frac{3}{5}$$

Q3

Answer :

We have:

$$0.08 = \frac{8}{100} = \frac{4}{50} = \frac{2}{25}$$

Q4

Answer :

We have:

$$0.15 = \frac{15}{100} = \frac{3}{20}$$

Q5

Answer :

We have:

$$0.48 = \frac{48}{100} = \frac{12}{25}$$

Q6

Answer :

We have:

$$0.053 = \frac{53}{1000}$$

Q7

Answer :

We have:

$$0.125 = \frac{125}{1000} = \frac{25}{200} = \frac{5}{40} = \frac{1}{8}$$

Q8

Answer :

We have:

$$0.224 = \frac{224}{1000} = \frac{56}{250} = \frac{28}{125}$$

Q9

Answer :

We have:

$$6.4 = \frac{64}{10} = \frac{32}{5} = 6\frac{2}{5}$$

Q10

Answer :

We have:

$$16.5 = \frac{165}{10} = \frac{33}{2} = 16\frac{1}{2}$$

Q11

Answer :

We have:

$$8.36 = \frac{836}{100} = \frac{209}{25} = 8\frac{9}{25}$$

Q12

Answer :

We have:

$$4.275 = \frac{4275}{1000} = \frac{171}{40} = 4\frac{11}{40}$$

Q13

Answer :

We have:

$$25.06 = \frac{2506}{100} = \frac{1253}{50} = 25\frac{3}{50}$$

Q14

Answer :

We have:

$$7.004 = \frac{7004}{1000} = \frac{1751}{250} = 7\frac{1}{250}$$

Q15

Answer :

We have:

$$2.052 = \frac{2052}{1000} = \frac{513}{250} = 2\frac{13}{250}$$

Q16

Answer :

We have:

$$3.108 = \frac{3108}{1000} = \frac{777}{250} = 3\frac{27}{250}$$

Q17

Answer :

We have:

$$\frac{23}{10} = 2\frac{3}{10} = 2 + 0.3 = 2.3$$

Q18

Answer :

We have:

$$\frac{167}{100} = 1 \frac{67}{100} = 1 + 0.67 = 1.67$$

Q19

Answer :

We have:

$$\frac{1589}{100} = 15 \frac{89}{100} = 15 + 0.89 = 15.89$$

Q20

Answer :

We have:

$$\frac{5413}{1000} = 5 \frac{413}{1000} = 5 + 0.413 = 5.413$$

Q21

Answer :

We have:

$$\frac{21415}{1000} = 21 \frac{415}{1000} = 21 + 0.415 = 21.415$$

Q22

Answer :

$$\begin{array}{r} 4 \overline{) 25} \text{ (6.25} \\ \underline{24} \\ 10 \\ \underline{8} \\ 20 \\ \underline{20} \\ \times \end{array}$$

We have:

$$\frac{25}{4} = 6 \frac{1}{4} = 6 + 0.25 = 6.25$$

Q23

Answer :

$$\begin{array}{r} 3 \frac{3}{5} = \frac{18}{5} \\ 5 \overline{) 18} \text{ (3.6} \\ \underline{15} \\ 30 \\ \underline{30} \\ \times \end{array}$$

We have:

$$3 \frac{3}{5} = 3 + 0.6 = 3.6$$

Q24

Answer :

$$1 \frac{4}{25} = \frac{29}{25}$$

$$\begin{array}{r} 25 \overline{) 29} \text{ (1.16} \\ \underline{25} \\ 40 \\ \underline{25} \\ 150 \\ \underline{150} \\ \times \end{array}$$

We have:

$$1 \frac{4}{25} = 1 + 0.16 = 1.16$$

Q25

Answer :

$$5 \frac{17}{50} = \frac{267}{50}$$

$$\begin{array}{r} 50 \overline{)267} (5.34 \\ \underline{250} \\ 170 \\ \underline{150} \\ 200 \\ \underline{200} \\ \hline 0 \end{array}$$

We have:

$$5 \frac{17}{50} = 5 + 0.34 = 5.34$$

Q26

Answer :

$$12 \frac{3}{8} = \frac{99}{8}$$

$$\begin{array}{r} 8 \overline{)99} (12.375 \\ \underline{8} \\ 19 \\ \underline{16} \\ 30 \\ \underline{24} \\ 60 \\ \underline{56} \\ 40 \\ \underline{40} \\ \hline 0 \end{array}$$

We have:

$$12 \frac{3}{8} = 12 + 0.375 = 12.375$$

Q27

Answer :

$$2 \frac{19}{40} = \frac{99}{40}$$

$$\begin{array}{r} 40 \overline{)99} (2.475 \\ \underline{80} \\ 190 \\ \underline{160} \\ 300 \\ \underline{280} \\ 200 \\ \underline{200} \\ \hline 0 \end{array}$$

We have:

$$2 \frac{19}{40} = 2 + 0.475 = 2.475$$

Q28

Answer :

$$\frac{19}{20}$$

$$\begin{array}{r} 20 \overline{)190} (.95 \\ \underline{180} \\ 100 \\ \underline{100} \\ \hline 0 \end{array}$$

We have:

$$\frac{19}{20} = 0.95$$

Q29

Answer :

$$\begin{array}{r} \frac{37}{50} \\ 50 \overline{)370} \begin{array}{l} 74 \\ 350 \\ \hline 200 \\ 200 \\ \hline \times \end{array} \end{array}$$

We have:

$$\frac{37}{50} = 0.74$$

Q30

Answer :

$$\begin{array}{r} \frac{107}{250} \\ 250 \overline{)1070} \begin{array}{l} 428 \\ 1000 \\ \hline 700 \\ 500 \\ \hline 2000 \\ 2000 \\ \hline \times \end{array} \end{array}$$

We have:

$$\frac{107}{250} = 0.428$$

Q31

Answer :

$$\begin{array}{r} \frac{3}{40} \\ 40 \overline{)300} \begin{array}{l} 0.75 \\ 280 \\ \hline 200 \\ 200 \\ \hline \times \end{array} \end{array}$$

We have:

$$\frac{3}{40} = 0.075$$

Q32

Answer :

$$\begin{array}{r} \frac{7}{8} \\ 8 \overline{)70} \begin{array}{l} 875 \\ 64 \\ \hline 60 \\ 56 \\ \hline 40 \\ 40 \\ \hline \times \end{array} \end{array}$$

We have:

$$\frac{7}{8} = 0.875$$

Q33

Answer :

(i) 8 kg 640 g in kilograms:

$$8 \text{ kg} + 640 \text{ gm} = 8 \text{ kg} + \frac{640}{1000} \text{ kg}$$

$$8 \text{ kg} + 0.640 \text{ kg} = 8.640 \text{ kg}$$

(ii) 9 kg 37 g in kilograms:

$$9 \text{ kg} + 37 \text{ gm} = 9 \text{ kg} + \frac{37}{1000} \text{ kg}$$

$$9 \text{ kg} + 0.037 \text{ kg} = 9.037 \text{ kg}$$

(iii) 6 kg 8 g in kilograms:

$$6 \text{ kg} + 8 \text{ gm} = 6 \text{ kg} + \frac{8}{1000} \text{ kg}$$

$$6 \text{ kg} + 0.008 \text{ kg} = 6.008 \text{ kg}$$

Q34

Answer :

(i) 4 km 365 m in kilometres:

$$4 \text{ km} + 365 \text{ m} = 4 \text{ km} + \frac{365}{1000} \text{ km} \quad [\text{Since } 1 \text{ km} = 1000 \text{ m}]$$

$$4 \text{ km} + 0.365 \text{ km} = 4.365 \text{ km}$$

(ii) 5 km 87 m in kilometres:

$$5 \text{ km} + 87 \text{ m} = 5 \text{ km} + \frac{87}{1000} \text{ km} \quad [\text{Since } 1 \text{ km} = 1000 \text{ m}]$$

$$5 \text{ km} + 0.087 \text{ km} = 5.087 \text{ km}$$

(iii) 3 km 6 m in kilometres:

$$3 \text{ km} + 6 \text{ m} = 3 \text{ km} + \frac{6}{1000} \text{ km} \quad [\text{Since } 1 \text{ km} = 1000 \text{ m}]$$

$$3 \text{ km} + 0.006 \text{ km} = 3.006 \text{ km}$$

(iv) 270 m in kilometres:

$$\frac{270}{1000} \text{ km} = 0.270 \text{ km} \quad [\text{Since } 1 \text{ km} = 1000 \text{ m}]$$

(v) 35 m in kilometres:

$$\frac{35}{1000} \text{ km} = 0.035 \text{ km} \quad [\text{Since } 1 \text{ km} = 1000 \text{ m}]$$

(vi) 6 m in kilometres:

$$\frac{6}{1000} \text{ km} = 0.006 \text{ km} \quad [\text{Since } 1 \text{ km} = 1000 \text{ m}]$$

Q35

Answer :

(i) 15 kg 850 g in kilograms:

$$15 \text{ kg} + 850 \text{ gm} = 15 \text{ kg} + \frac{850}{1000} \text{ kg} \quad [\text{Since } 1 \text{ kg} = 1000 \text{ gm}]$$

$$15 \text{ kg} + 0.850 \text{ kg} = 15.850 \text{ kg}$$

(ii) 8 kg 96 g in kilograms:

$$8 \text{ kg} + 96 \text{ gm} = 8 \text{ kg} + \frac{96}{1000} \text{ kg} \quad [\text{Since } 1 \text{ kg} = 1000 \text{ gm}]$$

$$8 \text{ kg} + 0.096 \text{ kg} = 8.096 \text{ kg}$$

(iii) 540 g in kilograms:

$$540 \text{ gm} = \frac{540}{1000} \text{ kg} = 0.540 \text{ kg} \quad [\text{Since } 1 \text{ kg} = 1000 \text{ gm}]$$

(iv) 8 g in kilograms:

$$8 \text{ gm} = \frac{8}{1000} \text{ kg} = 0.008 \text{ kg} \quad [\text{Since } 1 \text{ kg} = 1000 \text{ gm}]$$

Q36

Answer :

(i) Rs 18 and 25 paise in rupees:

$$\text{Rs } 18 + 25 \text{ paise} = \text{Rs } 18 + \text{Rs } \frac{25}{100} \quad [\text{Since Re } 1 = 100 \text{ paise}]$$

$$\text{Rs } 18 + \text{Rs } 0.25 = \text{Rs } 18.25$$

(ii) Rs 9 and 8 paise in rupees:

$$\text{Rs } 9 + 8 \text{ paise} = \text{Rs } 9 + \text{Rs } \frac{8}{100} \quad [\text{Since Re } 1 = 100 \text{ paise}]$$

$$\text{Rs } 9 + \text{Rs } 0.08 = \text{Rs } 9.08$$

(iii) 32 paise in rupees:

$$32 \text{ paise} = \text{Rs } \frac{32}{100} = \text{Rs } 0.32 \quad [\text{Since Re } 1 = 100 \text{ paise}]$$

(iv) 5 paise in rupees:

$$5 \text{ paise} = \text{Rs } \frac{5}{100} = \text{Rs } 0.05 \quad [\text{Since Re } 1 = 100 \text{ paise}]$$

Decimals

Exercise 7C

Q1

Answer :

9.6, 14.8, 37 and 5.9

Converting the decimals into like decimals:

9.6, 14.8, 37.0 and 5.9

Let us write the given numbers in the column form.

Now, adding:

$$\begin{array}{r} 9.6 \\ 14.8 \\ 37.0 \\ \underline{5.9} \\ \hline 67.3 \end{array}$$

Hence, the sum of the given numbers is 67.3.

Q2

Answer :

23.7, 106.94, 68.9 and 29.5

Converting the decimals into like decimals:

23.70, 106.94, 68.90 and 29.50

Let us write the given numbers in the column form.

Now, adding:

$$\begin{array}{r} 23.70 \\ 106.94 \\ 68.90 \\ \underline{29.50} \\ \hline 229.04 \end{array}$$

Hence, the sum of the given numbers is 229.04.

Q3

Answer :

72.8, 7.68, 16.23 and 0.7

Converting the decimals into like decimals:

72.80, 7.68, 16.23 and 0.70

Let us write the given numbers in the column form.

Now, adding:

$$\begin{array}{r} 72.80 \\ 7.68 \\ 16.23 \\ \underline{0.70} \\ \hline 97.41 \end{array}$$

Hence, the sum of the given numbers is 97.41.

Q4

Answer :

18.6, 84.75, 8.345 and 9.7

Converting the decimals into like decimals:

18.600, 84.750, 8.345 and 9.700

Let us write the given numbers in the column form.

Now, adding:

18.600

84.750

8.345

9.700

121.395

Hence, the sum of the given numbers is 121.395.

Q5

Answer :

8.236, 16.064, 63.8 and 27.53

Converting the decimals into like decimals:

8.236, 16.064, 63.800 and 27.530

Let us write the given numbers in the column form.

Now, adding:

8.236

16.064

63.800

27.530

115.630

Hence, the sum of the given numbers is 115.630.

Q6

Answer :

28.9, 19.64, 123.697 and 0.354

Converting the decimals into like decimals:

28.900, 19.640, 123.697 and 0.354

Let us write the given numbers in the column form.

Now, adding:

28.900

19.640

123.697

0.354

172.591

Hence, the sum of the given numbers is 172.591.

Q7

Answer :

4.37, 9.638, 17.007 and 6.8

Converting the decimals into like decimals:

4.370, 9.638, 17.007 and 6.800

Let us write the given numbers in the column form.

Now, adding:

4.370

9.683

17.007

6.800

37.815

Hence, the sum of the given numbers is 37.815.

Q8

Answer :

14.5, 0.038, 118.573 and 6.84

Converting the decimals into like decimals:

14.500, 0.038, 118.573 and 6.840

Let us write the given numbers in the column form.

Now, adding:

14.500

0.038

118.573

6.840

139.951

Hence, the sum of the given numbers is 139.951.

Q9

Answer :

Earning on the 1st day of the week = Rs 32.60

Earning on the 2nd day of the week = Rs 56.80

Earning on the 3rd day of the week = Rs 72.00

Total earning = Rs 161.40

Q10

Answer :

Cost of the almirah = Rs 11025.00

Money spent on cartage = Rs 172.50

Money spent on repair = Rs 64.800

Total cost of the almirah = Rs 11262.3

Q11

Answer :

Distance covered by the taxi = 36 km 235 m

Distance covered by the rickshaw = 4 km 085 m

Distance covered on foot = 1 km 080 m

Total distance covered = 41 km 400 m

Q12

Answer :

Weight of sugar in the bag = 45 kg 080 g

Weight of the empty bag = 0 kg 950 g

Total weight of the bag = 46 kg 030 g

Q13

Answer :

Length of cloth for his shirt = 2 m 70 cm

Length of cloth for his pyjamas = 2 m 60 cm

Total length of cloth bought = 5 m 30 cm

Q14

Answer :

Length of cloth for her salwar = 2 m 05 cm

Length of cloth for her shirt = 3 m 35 cm

Total length of cloth bought = 5 m 40 cm

Decimals

Exercise 7D

Q1

Answer :

Let us write the numbers in the column form with the larger one at the top.

Now, subtracting:

$$\begin{array}{r} 53.74 \\ - 27.86 \\ \hline 25.88 \end{array}$$

$\therefore 53.74 - 27.86 = 25.88$

Q2

Answer :

Let us write the numbers in the column form with the larger one at the top.

Now, subtracting:

$$\begin{array}{r} 103.87 \\ - 64.98 \\ \hline 38.89 \end{array}$$

$\therefore 103.87 - 64.98 = 38.89$

Q3

Answer :

Converting the given numbers into like decimals:

59.63 and 92.40

Let us write them in the column form with the larger number at the top.

Now, subtracting:

$$\begin{array}{r} 92.40 \\ - 59.63 \\ \hline 32.77 \end{array}$$

$\therefore 92.40 - 59.63 = 32.77$

Q4

Answer :

Converting the given numbers into like decimals:

56.80 and 204.00

Let us write them in the column form with the larger number at the top.

Now, subtracting:

204.00

- 56.80

147.2

$\therefore 204.00 - 56.80 = 147.2$

Q5

Answer :

Converting the given numbers into like decimals:

127.38 and 216.20

Let us write them in the column form with the larger number at the top.

Now, subtracting:

216.20

- 127.38

88.82

$\therefore 216.20 - 127.38 = 88.82$

Q6

Answer :

Converting the given numbers into like decimals:

39.875 and 70.680

Let us write them in the column form with the larger number at the top.

Now, subtracting:

70.680

- 39.875

30.805

$\therefore 70.680 - 39.875 = 30.805$

Q7

Answer :

Converting the given numbers into like decimals:

348.237 and 523.120

Let us write them in the column form with the larger number at the top.

Now, subtracting:

523.120

- 348.237

174.883

$\therefore 523.120 - 348.237 = 174.883$

Q8

Answer :

Converting the given numbers into like decimals:

458.573 and 600.000

Let us write them in the column form with the larger number at the top.

Now, subtracting:

600.000

- 458.573

141.427

$\therefore 600.000 - 458.573 = 141.427$

Q9

Answer :

Let us write the numbers in the column form with the larger one at the top.

Now, subtracting:

$$\begin{array}{r} 206.321 \\ - 149.456 \\ \hline 56.865 \end{array}$$

$\therefore 206.321 - 149.456 = 56.865$

Q10

Answer :

Converting the given numbers into like decimals:

3.400 and 0.612

Let us write them in the column form with the larger number at the top.

Now, subtracting:

$$\begin{array}{r} 3.400 \\ - 0.612 \\ \hline 2.788 \end{array}$$

$\therefore 3.400 - 0.612 = 2.788$

Q11

Answer :

Converting the given decimals into like decimals, then adding and, finally, subtracting:

$$\begin{array}{r} 37.60 \\ + 72.85 \\ \hline 110.45 \end{array} \quad \begin{array}{r} 58.678 \\ + 6.090 \\ \hline 64.768 \end{array}$$

$$\begin{array}{r} 110.450 \\ - 64.768 \\ \hline 45.682 \end{array}$$

$$\begin{aligned} & (37.60 + 72.85) - (58.678 + 6.090) \\ &= 110.450 - 64.768 \\ &= 45.682 \end{aligned}$$

Q12

Answer :

Converting the given decimals into like decimals, then adding and, finally, subtracting:

$$\begin{array}{r} 178.96 \\ + 75.30 \\ \hline 254.26 \end{array} \quad \begin{array}{r} 104.645 \\ + 47.900 \\ \hline 152.545 \end{array}$$

$$\begin{aligned} & (75.30 + 178.96) - (104.645 + 47.900) \\ &= 254.260 - 152.545 \\ & \begin{array}{r} 254.260 \\ - 152.545 \\ \hline 101.715 \end{array} \end{aligned}$$

Q13

Answer :

Converting the given decimals into like decimals, then adding and, finally, subtracting:

$$\begin{array}{r} 56.840 \\ 11.870 \\ +16.087 \\ \hline 84.797 \end{array}$$

$$(213.400) - (56.840 + 11.870 + 16.087)$$

$$213.400 - 84.797$$

$$\begin{array}{r} 213.400 \\ 128.603 \\ - 84.797 \\ \hline 128.603 \end{array}$$

Q14

Answer :

Converting the given decimals into like decimals, then adding and, finally, subtracting:

$$\begin{array}{r} 7.666 \\ + 6.770 \\ \hline 14.436 \end{array}$$

$$(76.300) - (7.666 + 6.770)$$

$$= 76.300 - 14.436$$

$$= 61.864$$

$$\begin{array}{r} 76.300 \\ -14.436 \\ \hline 61.864 \end{array}$$

Q15

Answer :

In order to get the number that must be added to 74.5 to get 91, we must subtract 74.5 from 91.0.

$$\begin{array}{r} 91.0 \\ - 74.5 \\ \hline 16.5 \end{array}$$

Thus, 16.5 is the required number.

Q16

Answer :

In order to get the number that must be subtracted from 7.300 to get .0862, we have to subtract 0.862 from 7.300.

$$\begin{array}{r} 7.300 \\ - 0.862 \\ \hline 6.438 \end{array}$$

Thus, 6.438 is the required number.

Q17

Answer :

In order to get the number by which 23.754 must be increased to get 50, we have to subtract 23.754 from 50.000.

$$\begin{array}{r} 50.000 \\ -23.754 \\ \hline 26.246 \end{array}$$

Q18

Answer :

In order to get the number by which 84.50 must be decreased to get 27.84, we have to subtract 27.84 from 84.50.

$$\begin{array}{r} 84.50 \\ -27.84 \\ \hline 56.66 \end{array}$$

Q19

Answer :

Weight of Neelam's school bag = 6080 g {Converting into grams: 6 kg + 80 g = (6000 + 80) g = 6080 g}

Weight of Garima's school bag = 5265 g {Converting into grams: 5 kg + 265 g = (5000 + 265)g = 5265 g}

Difference of the weights of bags = 815 g

Thus, the weight of Neelam's school bag is more than that of Garima's school bag by 815 grams, i.e. by 0.815 kg.

Q20

Answer :

Cost of the notebook = Rs 19.75

Cost of the pencil = Rs 3.85

Cost of the pen = + Rs 8.35

Total cost payable = Rs 31.95

Total money paid = Rs 50.00

Total money spent = Rs 31.95

Balance = Rs 18.05

Thus, Kunal got back Rs 18.05 from the shopkeeper.

Q21

Answer :

Weight of the fruits = 5 kg 075 g

Weight of the vegetables = + 3 kg 465 g

Total weight of the contents of the bag = 8 kg 540 g

Total weight of the bag with its contents = 9 kg 000 g

Total weight of the contents of the bag = 8 kg 540 g

Weight of the empty bag = 0 kg 460 g

Thus, the weight of the empty bag is 460 grams.

Q22

Answer :

Converting into metres:

10 km 65 m = (10 + 0.065) m = 10.065 m

3 km 75 m = (3 + 0.075) m = 3.075 m

Distance covered by the scooter = 10.065 km

Distance covered by the bus = + 3.075 km

Total distance covered by the bus and the scooter = 13.140 km

Total distance between the house and the office = 14.000 km

Total distance covered by the bus and the scooter = 13.140 km

Distance covered on foot = 0.860 km

∴ Distance covered by walking = 0.860 km = 860 metres

Decimals

Exercise 7E

Q1

Answer :

(c) 0.7

$$\frac{7}{10} = 7 \text{ tenths} = 0.7$$

Q2

Answer :

(d) 0.05

$$\frac{5}{100} = 5 \text{ hundredths} = 0.05$$

Q3

Answer :

(b) 0.009

$$\frac{9}{1000} = 9 \text{ thousandths} = 0.009$$

Q4

Answer :

(a) 0.016

$$\frac{16}{1000} = 16 \text{ thousandths} = 0.016$$

Q5

Answer :

(c) 0.134

$$\frac{134}{1000} = 134 \text{ thousandths} = 0.134$$

Q6

Answer :

(a) 2.17

$$2\frac{17}{100} = 2 + \frac{17}{100} = 2 + 0.17 = 2.17$$

Q7

Answer :

(b) 4.03

$$4\frac{3}{100} = 4 + \frac{3}{100} = 4 + 0.03 = 4.03$$

Q8

Answer :

b)

$$6.25 = 6 + 0.25 = 6 + \frac{1}{4} = 6\frac{1}{4}$$

Q9

Answer :

(b) 0.24

$$\frac{6}{25} = 0.24$$

$$\begin{array}{r} 25 \overline{) 60} \quad (0.24 \\ -50 \\ \hline 100 \\ -100 \\ \hline 0 \end{array}$$

Q10

Answer :

(c) 4.875

$$4\frac{7}{8} = 4 + \frac{7}{8} = 4 + 0.875 = 4.875$$

Q11

Answer :

(a) $24\frac{4}{5}$

$$24.8 = 24 + 0.8 = 24 + \frac{8}{10} = 24 + \frac{4}{5} = 24\frac{4}{5}$$

Q12

Answer :

(b) 2.04

$$2\frac{1}{25} = 2 + \frac{1}{25} = 2 + 0.04 = 2.04$$

Q13

Answer :

(c) 2.34

$$2 + \frac{3}{10} + \frac{4}{100} = 2 + 0.3 + 0.04 = 2.34$$

Q14

Answer :

(b) 2.06

$$2 + \frac{6}{100} = 2 + 0.06 = 2.06$$

Q15

Answer :

(c) 0.0407

$$\frac{4}{100} + \frac{7}{10000} = 0.04 + 0.0007 = 0.0407$$

Q16

Answer :

$$(c) \left(2 \times 1\right) + \left(6 \times \frac{1}{100}\right)$$

$$2.06 = 2 +$$

$$\frac{6}{100} \left(2 \times 1\right) + \left(6 \times \frac{1}{100}\right)$$

Q17

Answer :

(d) 2.66

Converting the given decimals into like decimals:

2.600, 2.006, 2.660 and 2.080

Among the given decimals, 2.660 is the largest.

Q18

Answer :

$$(b) 2.002 < 2.02 < 2.2 < 2.222$$

Converting the given decimals into like decimals:

2.002, 2.020, 2.200, 2.222

$$\therefore 2.002 < 2.02 < 2.2 < 2.222$$

Q19

Answer :

(a) 2.1

If we convert the given decimals into like decimals, we get 2.100 and 2.055.

At tenths place, 1 is greater than 0. Thus, 2.100 is greater than 2.055.

Q20

Answer :

(b) 0.01 m

$$1 \text{ m} = 100 \text{ cm}$$

$$\therefore 1 \text{ cm} = \frac{1}{100} \text{ m} = 0.01 \text{ m}$$

Q21

Answer :

(b) 2.05 m

$$2 \text{ m } 5 \text{ cm} = \left(2 + \frac{5}{100}\right) \text{ m} = (2 + 0.05) \text{ m} = 2.05 \text{ m}$$

Q22

Answer :

(c) 2.008 kg

$$1 \text{ kg} = 1000 \text{ g}$$

$$\therefore 2 \text{ kg } 8 \text{ g} = 2 \text{ kg} + \frac{8}{1000} \text{ kg} = (2 + 0.008) \text{ kg} = 2.008 \text{ kg}$$

Q23

Answer :

(b) 2.056 kg

$$2 \text{ kg } + 56 \text{ g} = \left(2 + \frac{56}{1000}\right) \text{ kg} = (2 + 0.056) \text{ kg} = 2.056 \text{ kg}$$

Q24

Answer :

(c) 2.035 km

$$1 \text{ km} = 1000 \text{ m}$$

$$\therefore 2 \text{ km } 35 \text{ m} = \left(2 + \frac{35}{1000}\right) \text{ km} = (2 + 0.035) \text{ km} = 2.035 \text{ km}$$

Q25

Answer :

(c) 4.804

$$0.4 + 0.004 + 4.4$$

Converting into like decimals and then adding:

$$\begin{array}{r} 4.400 \\ 0.004 \\ + 0.400 \\ \hline 4.804 \end{array}$$

Q26

Answer :

(a) 1.545

Converting into like decimals:

$$3.500 + 4.050 - 6.005$$

$$\begin{array}{r} 3.500 \\ + 4.050 \\ \hline 7.550 \end{array}$$

$$\begin{array}{r} 7.550 \\ - 6.005 \\ \hline 1.545 \end{array}$$

Q27

Answer :

(b) 3.5

$$\begin{array}{r} 6.3 \\ - 2.8 \\ \hline 3.5 \end{array}$$

Q28

Answer :

(c) 1.41

Converting into like decimals and then subtracting:

$$\begin{array}{r} 5.01 \\ - 3.60 \\ \hline 1.41 \end{array}$$

Q29

Answer :

(a) 1.3

Converting into like decimals and then subtracting:

$$\begin{array}{r} 2.0 \\ - 0.7 \\ \hline 1.3 \end{array}$$

Q30

Answer :

(a) 0.8

Converting into like decimals and then subtracting:

$$\begin{array}{r} 1.1 \\ - 0.3 \\ \hline 0.8 \end{array}$$