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
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 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
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 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 :

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

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

Q23

Answer :

$$3\frac{3}{5} = \frac{18}{5}$$

$$\begin{array}{r} 5\overline{)\,18\,(3.6} \\ \underline{15} \\ 30 \\ \underline{30} \\ \times \end{array}$$

We have:
$3\frac{3}{5} = 3 + 0.6 = 3.6$

Q24

Answer :

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

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

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

Q25

Answer :

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

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

We have:

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

Q26

Answer :

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

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

We have:

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

Q27

Answer :

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

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

We have:

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

Q28

Answer :

$\frac{19}{20}$

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

We have:

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

Q29

Answer :

$\frac{37}{50}$

$50\overline{)370}(.74$
$\underline{350}$
200
$\underline{200}$
$\times$

We have:
$\frac{37}{50} = 0.74$

Q30

Answer :

$\frac{107}{250}$

$250\overline{)1070}(.428$
$\underline{1000}$
700
$\underline{500}$
2000
$\underline{2000}$
$\times$

We have:
$\frac{107}{250} = 0.428$

Q31

Answer :

$\frac{3}{40}$

$40\overline{)300}(.0.75$
$\underline{280}$
200
$\underline{200}$
$\times$

We have:
$\frac{3}{40} = 0.075$

Q32

Answer :

$\frac{7}{8}$

$8\overline{)\ 70\ }(.875$
$\underline{64}$
60
$\underline{56}$
40
$\underline{40}$
$\times$

We have:
$\frac{7}{8} = 0.875$

Q33

Answer :

(i) 8 kg 640 g in kilograms:
8 kg + 640 gm = 8 kg + $\frac{640}{1000}$ kg
8 kg + 0.640 kg = 8.640 kg

(ii) 9 kg 37 g in kilograms:
9 kg + 37 gm = 9 kg + $\frac{37}{1000}$ kg
9 kg + 0.037 kg = 9.037 kg

(iii) 6 kg 8 g in kilograms:
6 kg + 8 gm = 6 kg + $\frac{8}{1000}$ kg
6 kg + 0.008 kg = 6.008 kg

Q34

Answer :

(i) 4 km 365 m in kilometres:

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

4 km + 0.365 km = 4.365 km

(ii) 5 km 87 m in kilometres:

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

5 km + 0.087 km = 5.087 km

(iii) 3 km 6 m in kilometres:

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

3 km + 0.006 km = 3.006 km

(iv) 270 m in kilometres:

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

(v) 35 m in kilometres:

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

(vi) 6 m in kilometres:

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

Q35

Answer :

(i) 15 kg 850 g in kilograms:

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

15 kg + 0.850 kg = 15.850 kg

(ii) 8 kg 96 g in kilograms:

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

8 kg + 0.096 kg = 8.096 kg

(iii) 540 g in kilograms:

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

(iv) 8 g in kilograms:

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

Q36

Answer :

(i) Rs 18 and 25 paise in rupees:

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

Rs 18 + Rs 0.25 = Rs 18.25

(ii) Rs 9 and 8 paise in rupees:

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

Rs 9 + Rs 0.08 = Rs 9.08

(iii) 32 paise in rupees:

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

(iv) 5 paise in rupees:

5 paise = Rs $\frac{5}{100}$ = Rs 0.05 [Since Re 1 = 100 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:

```
  9.6
 14.8
 37.0
  5.9
 67.3
```

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:

```
  23.70
 106.94
  68.90
  29.50
 229.04
```

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:

```
  72.80
   7.68
  16.23
   0.70
  97.41
```

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:

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

$\therefore$ 53.74 - 27.86 = 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
∴ 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
∴ 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
∴ 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
∴ 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
∴ 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:

```
  206.321
- 149.456
  ------
   56.865
```

∴ 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:

```
  3.400
- 0.612
  -----
  2.788
```

∴ 3.400 - 0.612 = 2.788

Q11

Answer :

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

```
   37.60          58.678
 + 72.85        +  6.090
 ------         -------
  110.45          64.768
```

```
  110.450
— 64.768
 -------
  45.682
```

(37.60 + 72.85) — (58.678 + 6.090)
= 110.450 — 64.768
= 45.682

Q12

Answer :

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

```
   178.96          104.645
 + 75.30         + 47.900
 ------          --------
  254.26          152.545
```

(75.30 + 178.96) — (104.645 + 47.900)
254.260 — 152.545
101.715

```
  254.260
— 152.545
 --------
  101.715
```

Q13

Answer :

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

```
  56.840
  11.870
+16.087
  84.797
```

(213.400) − (56.840 + 11.870 + 16.087)
213.400 − 84.797
128.603

```
  213.400
− 84.797
  128.603
```

Q14

Answer :

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

```
   7.666
+  6.770
  14.436
```

(76.300) − (7.666 + 6.770)
= 76.300 − 14.436
= 61.864

```
 76.300
-14.436
 61.864
```

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.

```
  91.0
− 74.5
  16.5
```

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.

```
   7.300
− 0.862
  6.438
```

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.

```
  50.000
−23.754
 26.246
```

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.

84.50
−27.84
56.66

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 tenths = 0.7

Q2

Answer :

(d) 0.05

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

Q3

Answer :

(b) 0.009

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

Q4

Answer :

(a) 0.016

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

Q5

Answer :

(c) 0.134

$\frac{134}{1000}$ = 134 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)

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

Q9

Answer :

(b) 0.24

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

25) 60 (0.24
−50
100
−100
0

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

∴ 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 m = 100 cm
∴ 1 cm = $\frac{1}{100}$m = 0.01 m

Q21

Answer :

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

Q22

Answer :

(c) 2.008 kg
1 kg = 1000 g
∴ 2 kg 8 g = 2 kg + $\frac{8}{1000}$ kg = (2 + 0.008) kg = 2.008 kg

Q23

Answer :

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

Q24

Answer :

(c) 2.035 km
1 km = 1000 m
∴ 2 km 35 m = (2 + $\frac{35}{1000}$) km = (2 + 0.035) km = 2.035 km

Q25

Answer :

(c) 4.804
0.4 + 0.004 + 4.4
Converting into like decimals and then adding:

```
  4.400
  0.004
+ 0.400
  4.804
```

Q26

Answer :

(a) 1.545
Converting into like decimals:
3.500 + 4.050 − 6.005

```
  3.500
+ 4.050
  7.550
```

```
  7.550
− 6.005
  1.545
```

Q27

Answer :

(b) 3.5

```
  6.3
− 2.8
  3.5
```

Q28

Answer :

(c) 1.41
Converting into like decimals and then subtracting:

```
  5.01
− 3.60
  1.41
```

Q29

Answer :

(a) 1.3
Converting into like decimals and then subtracting:

```
  2.0
− 0.7
  1.3
```

Q30

Answer :

(a) 0.8
Converting into like decimals and then subtracting:

```
  1.1
− 0.3
  0.8
```