

NCERT solution Decimals-3

Exercise 8.4

Question 1

Express as rupees using decimals.

- (a) 5 paise
- (b) 75 paise
- (c) 20 paise
- (d) 50 rupees 90 paise
- (e) 725 paise

Answer

We know that 100 paise = Rs 1
Therefore, 1 paise = Rs $\frac{1}{100}$ = Rs

- a) 5 p = $\frac{5}{100}$ = Rs .05
- b) 75 p = $\frac{75}{100}$ = Rs .75
- c) 20 p = $\frac{20}{100}$ = Rs .2
- d) 50 rupees 90 paise = $50 + \frac{90}{100}$ = Rs 50.9
- e) 725 paise = $\frac{725}{100}$ = Rs 7.25

Question 2

Express as metres using decimals.

- (a) 15 cm

- (b) 6 cm
- (c) 2 m 45 cm
- (d) 9 m 7 cm
- (e) 419 cm

Answer

1 m = 100 cm so 1 cm = $\frac{1}{100}$ m

- a) 15 cm = $\frac{15}{100}$ m = .15 m
- b) 6 cm = $\frac{6}{100}$ m = .06m
- c) 2 m 45 cm = $(2 + \frac{45}{100})$ m = 2.45 m
- d) 9 m 7 cm = $(9 + \frac{7}{100})$ m = 9.07 m
- e) 419 cm = 4.19 m

Question 3

Express as km using decimals.

- (a) 8 m
- (b) 88 m
- (c) 8888 m
- (d) 70 km 5 m

Answer

1 km = 1000 m

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

- a) 8 m = $\frac{8}{1000}$ km = .008 km
- b) 88 m = $\frac{88}{1000}$ km = .088 km

c) $8888 \text{ m} = 8888/1000 \text{ km} = 8.888 \text{ km}$

d) $70 \text{ km } 5\text{m} = (70 + 5/1000) \text{ km} = 70.005 \text{ km}$

Question 4

Express as kg using decimals.

(a) 2 g

(b) 100 g

(c) 3750 g

(d) 5 kg 8 g

(e) 26 kg 50 g

Answer

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

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

a) $2 \text{ g} = 2/1000 \text{ kg} = .002 \text{ kg}$

b) $100 \text{ g} = 100/1000 \text{ kg} = .1 \text{ kg}$

c) $3750 \text{ g} = 3750/1000 \text{ kg} = 3.75 \text{ kg}$

d) $5 \text{ kg } 8 \text{ g} = (5 + 8/1000) \text{ kg} = 5.008 \text{ kg}$

e) $26 \text{ kg } 50 \text{ g} = (26 + 50/1000) \text{ kg} = 26.50 \text{ kg}$

Exercise 8.5

Question 1

Find the sum in each of the following:

(a) $0.007 + 8.5 + 30.08$

(b) $15 + 0.632 + 13.8$

(c) $27.076 + 0.55 + 0.004$

(d) $25.65 + 9.005 + 3.7$

(e) $0.75 + 10.425 + 2$

(f) $280.69 + 25.2 + 38$

Answer

(a) $0.007 + 8.5 + 30.08$

.0007
8.500 +
30.080
38.587

(b) $15 + 0.632 + 13.8$

15 .000
0.632 +
13.800
29.432

Similarly

$$\begin{aligned} \text{(c) } & 27.076 + 0.55 + 0.004 \\ & = 27.630 \end{aligned}$$

$$\begin{aligned} \text{(d) } & 25.65 + 9.005 + 3.7 \\ & = 38.355 \end{aligned}$$

$$\begin{aligned} \text{(e) } & 0.75 + 10.425 + 2 \\ & = 13.175 \end{aligned}$$

$$\begin{aligned} \text{(f) } & 280.69 + 25.2 + 38 \\ & = 343.890 \end{aligned}$$

Question 2

Rashid spent Rs 35.75 for Math's book and Rs 32.60 for Science book. Find the total amount spent by Rashid.

Answer

Amount spent for Math's book = Rs. 35.75

Amount spent for Science book = Rs. 32.60

Total amount spent for the books by Rashid = $35.75 + 32.60$

35 .75
32. 60 +
68.35

So, Rashid spent Rs. 68.35 for the books.

Question 3

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Radhika's mother gave her Rs 10.50 and her father gave her Rs 15.80, find the total amount given to Radhika by the parents?

Answer

Amount given by mother = Rs. 10.50

Amount given by father = Rs. 15.80

Total amount = Rs. 10.50 + 15.80

Doing the addition similarly as given above

Total amount=26.30

Question 4

Nasreen bought 3 m 20 cm cloth for her shirt and 2 m 5 cm cloth for her trouser. Find the total length of cloth bought by her.

Answer

We know that 1 m=100 cm and 1 cm = 1/100 m

Length of the cloth purchased for shirt = 3 m 20 cm

=3m + 20/100 m= 3.2 m

Length of the cloth purchased for trouser = 2 m 5 cm

=2m + 5/100m = 2.05 m

Total length of the cloth purchased =

=3.20 + 2.05

Doing the addition similarly as given above in addition question

Total length of the cloth purchased = 5.25 m

Question 5

Naresh walked 2 km 35 m in the morning and 1 km 7 m in the evening. How much distance did he walk in all?

Answer

We know that 1 km=1000 m and 1 m = 1/1000 km

Distance walked in the morning = 2 km 35 m
= 2 km + 35/1000 km= 2.035 km

Distance covered in the evening = 1 km 7 m
= 1 km + 7/1000 km= 1.007 km

Distance he walked in all = (2.035 + 1.007) km
=3.042 km

Distance Naresh walked in all = 3.042 km

Question 6

Sunita travelled 15 km 268 m by bus, 7 km 7 m by car and 500 m on foot in order to reach her school. How far is her school from her residence?

Answer

We know that 1 km=1000 m and 1 m = 1/1000 km

Distance travelled by Sunita in bus = 15 km 268 m
= 15 km + 268/1000 km= 15.268 km

Distance travelled by Sunita in car = 7 km 7 m
=7 km + 7/1000 km= 7.007 km

Distance travelled by Sunita on foot = 500 m = 0.5 km

Total distance travelled =15.268 km + 7.007 km+0.5 km =22.775 km

Total distance travelled is 22.775 km

Question 7

Ravi purchased 5 kg 400 g rice, 2 kg 20 g sugar and 10 kg 850 g flour. Find the total weight of his purchases.

Answer

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Amount of rice = 5 kg 400 g = 5.400 kg
Amount of sugar = 2 kg 20 g = 2.020 kg
Amount of flour = 10 kg 850 g = 10.850 kg

Total purchase = 5.400 kg + 2.020 kg + 10.850 kg
= 18.270 kg

Total amount of purchase = 18.270 kg

Exercise 8.6

Question 1

Subtract:

- (a) Rs 18.25 from Rs 20.75
- (b) 202.54 m from 250 m
- (c) Rs 5.36 from Rs 8.40
- (d) 2.051 km from 5.206 km
- (e) 0.314 kg from 2.107 kg

Answer

a)

20.75
18.25 -
02.50

b)

250.00

202.54 -

47.46

c)

8.40

5.36 -

3.04

d)

5.206

2.051 -

3.155

e)

2.107

0.314 -

1.793

Question 2

Find the value of:

(a) $9.756 - 6.28$

(b) $21.05 - 15.27$

(c) $18.5 - 6.79$

(d) $11.6 - 9.847$

Answer

Solving similarly as above

(a) $9.756 - 6.28 = 3.476$

(b) $21.05 - 15.27 = 5.78$

(c) $18.5 - 6.79 = 11.71$

(d) $11.6 - 9.847 = 1.753$

Question 3

Raju bought a book for Rs 35.65. He gave Rs 50 to the shopkeeper. How much money did he get back from the shopkeeper?

Answer

Cost of the book Raju purchased = Rs. 35.65

Money paid by Raju to the shopkeeper = Rs. 50

Remaining = Rs. 50 - Rs. 35.65

Solving the subtraction similarly as given above

= Rs 14.35

Question 4

Rani had Rs 18.50. She bought one ice-cream for Rs 11.75. How much money does she have now?

Answer

Money with Rani = Rs. 18.50

Amount she spent on an ice-cream = Rs. 11.75

Remaining = $18.50 - 11.75$

Solving the subtraction similarly as given above

= Rs 6.75

Question 5

Tina had 20 m 5 cm long cloth. She cuts 4 m 50 cm length of cloth from this for making a curtain. How much cloth is left with her?

Answer

Length of the cloth which Tina had = 20 m 5 cm = 20.05 m
Length of the cloth which Tina cuts = 4 m 50 cm = 4.50 m
Length of the cloth left with her = 20.05 m - 4.50 m
= 15.55 m

Question 6

Namita travels 20 km 50 m every day. Out of this, she travels 10 km 200 m by bus and the rest by auto. How much distance does she travel by auto?

Answer

Total distance Namita travelled every day is 20 km 50 m = 20.050 km
Distance travelled in bus is 10 km 200 m = 10.200 km
Distance travelled in auto
= 9.850 km

Question 7

Aakash bought vegetables weighing 10 kg. Out of this, 3 kg 500 g is onions, 2 kg 75 g is tomatoes and the rest is potatoes. What is the weight of the potatoes?

Answer

We know that 1 kg = 1000g and 1 g = 1/1000 kg

Total weight of the vegetables purchased = 10 kg
Weight of onions = 3 kg 500 g = 3.500 kg
Weight of tomatoes = 2 kg 75 g = 2.075 kg
Weight of onions and tomatoes = 3.500 + 2.075
= 5.575 kg

Weight of potatoes = Weight of the vegetables - weight of onions and tomatoes
= 10 - 5.575 = 4.425