13

Money is the finest mode of exchange of goods and services. We have learnt to recognise notes and coins of different denominations, express money in terms of decimal, convert rupees to paise and vice versa. We have also solved word problems involving money.

Money

Indian money is based on decimal system of numeration. The unit of money is rupee. There are two forms of currency in India : Rupees and paise. These forms are available in notes and coins. There are 1 Rupee, 2 rupees, 5 rupees and 10 rupees coins and 1 rupee, 2 rupees, 5 rupees, 10 rupees, 20 rupees, 50 rupees, 100 rupees, 500 rupees and 2000 rupees notes are available in the market.

1 rupee = 100 paise

It can also be written as ₹ 1.00.

We write decimal point between rupee and paise.

For Example :   a. ₹ 11.50 means 11 rupees and 50 paise.

b. 575 paise is equal to 5 rupees and 75 paise or ₹ 5.75.

INFO ZONE

○ To convert paise into rupees, place the decimal point after counting two digits from the right end.

○ To convert rupees into paise, multiply the number of rupees by 100 or write two zeros to the right of the number of rupees.

1. Convert the following into rupees.

a. 215 p = ... b. 275 p = ...

c. 445 p = ... d. 1020 p = ...

e. 500 p = ... f. 1279 p = ...

2. Convert the following into paise.

a. ₹ 6.25 = ... b. ₹ 2.50 = ...

c. ₹ 38.75 = ... d. ₹ 135.02 = ...

3. Find out the total amount of money.

	₹ 100	₹ 50	₹ 10	₹ 5	₹ 1	50 p	25 p	10 p	Total
a.			1	1			1	1	₹ 15.35
b.	1		1		1			2	
c.		1	2	3		2	2		
d.				2		3		2	
e.	2			3		3			
f.		4	2		2		3		

Addition and Subtraction of Money

While performing addition and subtraction, care must be taken to place the decimal point one below the other and then add or subtract as usual. Remember to put the decimal point in the same place, i.e. two digits from the right end.

For Example :

$$
\begin{array}{r}
534.70 \\
+\ 65.25 \\
\hline
599.95 \\
\end{array}
\qquad
\begin{array}{r}
700.00 \\
-\ 553.75 \\
\hline
146.25 \\
\end{array}
$$

Example I : If a 100-rupee note and a 50-rupee note were given to pay the bill, find the amount received in change.

Solution :

Bill

Bread	—	₹ 10.50
Eggs	—	₹ 55.75
Sauce	—	₹ 42.25
Talcum Powder	—	₹ 23.00
Total	—	₹ 131.50

Paid

₹	Paise
150	.00
−131	.50
18	.50

Amount received in change

EXERCISE 13.2

1. Find the sum.

a. ₹ 3.75 + ₹ 4.25 + ₹ 7.85

b. ₹ 33.25 + ₹ 10.50 + ₹ 25.15

c. ₹ 105.75 + ₹ 35.25 + ₹ 48.70

d. ₹ 261.50 + ₹ 100.05 + ₹ 50.85

2. Find the difference.

a. ₹ 13.95 − ₹ 10.70

b. ₹ 129.25 − ₹ 85.95

c. ₹ 200 − ₹ 124.60

d. ₹ 1295.25 − ₹ 1011.35

3. Prepare the bill for shopping at different venues.

a. **Stationery shop :** Notebooks : ₹ 20.50, Pencils : ₹ 42.75
Eraser : ₹ 4.00, Books : ₹ 54.25

b. **Vegetable shop :** Potatoes : ₹ 22.75, Tomatoes : ₹ 15.00,
Peas : ₹ 41.00, Ginger : ₹ 9.55

c. **Sweets shop :** Kaju barfi : ₹ 350.00, Rasgulla : ₹ 48.50
Gulab jamun : ₹ 82.35
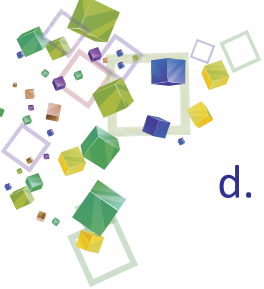
d. **Garment shop** :   Pullover : ₹ 569.50, Shawl : ₹ 925.35

Shirt : ₹ 1035.75, Saree : ₹ 2365.25

4. If I give ₹ 100 to the shopkeeper, how much will he return if I purchased a storybook for ₹ 23.68, a sketch pen set for ₹ 14.75, a drawing file for ₹ 17.68, one pencil for ₹ 4.25 and one eraser for ₹ 3.35?

5. Find the amount received in each case as change.

a. **Paid**

Shirt	—	₹ 399.75
Trousers	—	₹ 275.65
Tie	—	₹ 75.95
Belt	—	₹ 120.55

b. **Paid**

Notebook	—	₹ 60.35
School bag	—	₹ 268.75
Tiffin box	—	₹ 27.90
Umbrella	—	₹ 110.15
Geometry box	—	₹ 55.65
Pen	—	₹ 20.00

6. a. Grandfather brought dresses for his grandchildren for ₹ 910.35, ₹ 824.40 and ₹ 535.15. How much money did he spend in all?

b. The price of refrigerator has increased from ₹ 10,000 to ₹ 12,750. Find the increase in price.

c. The price of washing soap has decreased from ₹ 175.25 to ₹ 99.75. Find the reduction in the price of the washing soap.

d. Rajan pocket money is ₹ 100. He spent ₹ 83.25. How much money is left with him?

Multiplication and Division of Money

Multiplication and division in rupees and paise by a number is similar to the multiplication or division of an ordinary number by a number.

Example II : Find the product.

$₹16.25 × 4$

Solution :

$$
\begin{array}{r}
16.25 \\
\times \quad 4 \\
\hline
₹\ 65.00 \\
\hline
\end{array}
$$

Therefore, $₹16.25 × 4$

$= ₹65.00$

Example III : Divide $₹60.03$ by 9.

Solution :

$$
\begin{array}{r}
9\ )\ 6\ 0.0\ 3\ (\ 6.67 \\
-\ 5\ 4 \quad\quad \\
\hline
6\ 0 \quad \\
-\ 5\ 4 \quad \\
\hline
6\ 3 \\
-\ 6\ 3 \\
\hline
0 \\
\hline
\end{array}
$$

Therefore, $₹60.03 ÷ 9$

$= ₹6.67$

Example IV : Cost of one geometry box is $₹30.40$.

Find the cost of 5 geometry boxes.

Solution   : Cost of 1 geometry box $=$ $₹30.40$

Cost of 5 geometry boxes $=$ $₹30.40 × 5$ $=$ $₹152.00$

EXERCISE 13.3

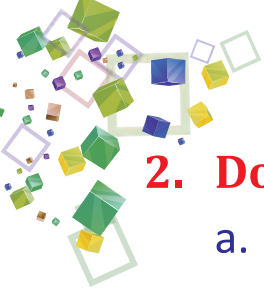**1. Find the product.**

a. $₹18.85 × 12$ b. $₹37.65 × 15$ c. $₹15.35 × 6$

d. $₹9.25 × 90$ e. $₹35.50 × 15$ f. $₹47.25 × 12$

2. Do the following divisions.

 a. ₹ 12.50 ÷ 12   b. ₹ 60.16 ÷ 16

 c. ₹ 630.55 ÷ 10   d. ₹ 1728.25 ÷ 25

 e. ₹ 12008.00 ÷ 6   f. ₹ 4371.30 ÷ 3

3. Find the cost of :

 a. 3 school bag at ₹ 975.50 each.

 b. 3 dozen pencils at ₹ 3.80 each.

 c. 5 storybooks at ₹ 12.50 each.

 d. 10 chairs at ₹ 369.20 each.

4. Vineet wants to buy a book costing ₹ 197.75. He has only ₹ 139 with him. How much more money does he need to buy the book?

5. Cost of 6 tablemats is ₹ 98.70. What is the cost of 1 mat?

6. 2 pairs of shoes cost ₹ 630.50. Find the cost of each pair.

7. Prepare the bill and make the payment for 2 kg rice for ₹ 35.20 per kg, 4 kg sugar for ₹ 19.75 per kg, 1 kg tea for ₹ 72.65 per kg.

8. Vaishali bought apples for ₹ 22.75. The shopkeeper returned ₹ 22.25. How much money did she give him.

9. Shikha bought 5 metres of cloth for ₹ 235.20. What is the cost of a metre of cloth?

POINTS TO REMEMBER

- ❖ 100 paise make 1 rupee.
- ❖ Indian currency is Rupees.
- ❖ There are two types of currencies in market : Coins and Notes.
- ❖ Now-a-days the coins of 1 rupee, 2 rupees, 5 rupees and 10 rupees are available in the market.
- ❖ The notes of 1 rupee, 2 rupees, 5 rupees, 10 rupees, 20 rupees, 50 rupees, 100 rupees, 500 rupees and 2000 rupees are available in the market.
- ❖ The rupees (Rs.) is denoted by ₹ these days.
- ❖ Currency of USA and UK is Dollar and Pound respectively.

RECAP EXERCISE
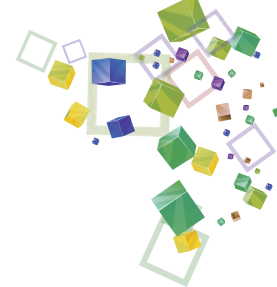
1. **Multiple Choice Questions (MCQs)**
   Tick (✓) the correct options:

   a. How many paise are there in 5 rupees?

   (i) 100 ☐   (ii) 200 ☐   (iii) 500 ☐   (iv) 400 ☐

   b. How many rupees are there in 700 paise?

   (i) 5 ☐   (ii) 7 ☐   (iii) 3 ☐   (iv) 2 ☐

   c. 12 rupees and 25 paise is written as ....

   (i) ₹1225 ☐   (ii) ₹12.25 ☐   (iii) ₹1.225 ☐   (iv) ₹122.5 ☐

   d. Currency of USA is ....

   (i) Rupee ☐   (ii) Paise ☐   (iii) Dollar ☐   (iv) Pound ☐

   e. Hari divides 100 rupees in his four children, how many rupees each child gets?

   (i) 20 ☐   (ii) 25 ☐   (iii) 40 ☐   (iv) 50 ☐

2. **Convert into rupees.**
   a. 600 paise   b. 1050 paise   c. 725 paise
   d. 550 paise   e. 675 paise   f. 950 paise

3. **Convert in paise.**
   a. ₹10.20   b. ₹50.75   c. ₹100.25
   d. ₹115.25   e. ₹145.50   f. ₹205.50

4. **Separate rupees and paise.**
   a. ₹50.40   b. ₹75.75   c. ₹109.02
   d. ₹60.05   e. ₹90.50   f. ₹150.08

5. **Combine rupees and paise together.**
   a. 20 rupees 20 paise   b. 55 rupees 75 paise
   c. 105 rupees 5 paise   d. 500 rupees 8 paise

6. Vansh bought a shirt for ₹ 225.50, a tie for ₹ 60.50 and a towel for ₹ 50.25. How much did he spend for these items in all?

7. The price of a chair is ₹ 250.50. What will be the price of 6 such chairs?

8. The cost of 8 fans is ₹ 8660. Find the cost of one fan.

9. Shalini bought one dozen pens for ₹ 150. What is the cost of one pen?

HOTS

On the day of fair, your grandmother gave you 8 ten-rupees coins, grandfather gave 10 five-rupee coins, mother gave 20 two-rupee coins and father gave 50 one-rupee coins. How much money do you have for fair?

A Gateway to Mathematics-4