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# Money, Profit and Loss

## Exercise-1

1. To convert rupees into paise, we multiply by 100.

(a) ₹ 1 = 100 p

∴ ₹ 15.00 =  $15 \times 100$  p = 1500 p

(b) ₹ 58.50 =  $(58 \times 100 + 50)$  p =  $(5800 + 50)$  p = 5850 p

(c) ₹ 72.25 =  $(72 \times 100 + 25)$  p =  $(7200 + 25)$  p = 7225 p

(d) ₹ 102.00 =  $102 \times 100$  p = 10200 p

(e) ₹ 124.25 =  $(124 \times 100 + 25)$  p =  $(12400 + 25)$  p = 12425 p

(f) ₹ 315.75 =  $(315 \times 100 + 75)$  p =  $(31500 + 75)$  p = 31575 p

(g) ₹ 453.25 =  $(453 \times 100 + 25)$  p =  $(45300 + 25)$  p = 45325 p

(h) ₹ 825.05 =  $(825 \times 100 + 5)$  p =  $(82500 + 5)$  p = 82505 p

2. To convert paise into rupees, we divide by 100.

(a) 100 p = ₹ 1

∴ 725 p = ₹  $(725 \div 100)$  = ₹ 7.25

(b) 3800 p = ₹  $(3800 \div 100)$  = ₹ 38.00

(c) 3550 p = ₹  $(3550 \div 100)$  = ₹ 35.50

(d) 4250 p = ₹  $(4250 \div 100)$  = ₹ 42.50

(e) 78 rupees 50 paise =  $(7800 + 50)$  p = 7850 p

Now 7850 p = ₹  $(7850 \div 100)$  = ₹ 78.50

(f) 10250 p = ₹  $(10250 \div 100)$  = ₹ 102.50

(g) 31255 p = ₹  $(31255 \div 100)$  = ₹ 312.55

(h) 6000 p = ₹  $(6000 \div 100)$  = ₹ 60.00

## Exercise-2

1. (a) ₹ 17.30 + ₹ 30.50

= ₹ 47.80

$$\begin{array}{r} ₹ 17.30 \\ + ₹ 30.50 \\ \hline ₹ 47.80 \end{array}$$

(b) ₹ 58.25 + ₹ 28.50

= ₹ 86.75

$$\begin{array}{r} ₹ 58.25 \\ + ₹ 28.50 \\ \hline ₹ 86.75 \end{array}$$

$$(c) \text{ ₹ } 153.00 + \text{ ₹ } 93.50$$

$$= \text{ ₹ } 246.50$$

$$\begin{array}{r} \textcircled{1} \\ \text{₹ } 153.00 \\ + \text{ ₹ } 93.50 \\ \hline \text{₹ } 246.50 \end{array}$$

$$(d) \text{ ₹ } 207.30 + \text{ ₹ } 197.50$$

$$= \text{ ₹ } 404.80$$

$$\begin{array}{r} \textcircled{1} \textcircled{1} \\ \text{₹ } 207.30 \\ + \text{ ₹ } 197.50 \\ \hline \text{₹ } 404.80 \end{array}$$

$$2. (a) \text{ ₹ } 30.00 - \text{ ₹ } 15.85$$

$$= \text{ ₹ } 14.15$$

$$\begin{array}{r} \textcircled{2} \textcircled{9} \quad \textcircled{9} \textcircled{10} \\ \text{₹ } 30.00 \\ - \text{ ₹ } 15.85 \\ \hline \text{₹ } 14.15 \end{array}$$

$$(b) \text{ ₹ } 52.50 - \text{ ₹ } 38.50$$

$$= \text{ ₹ } 14.00$$

$$\begin{array}{r} \textcircled{4} \textcircled{12} \\ \text{₹ } 52.50 \\ - \text{ ₹ } 38.50 \\ \hline \text{₹ } 14.00 \end{array}$$

$$(c) \text{ ₹ } 600.00 - \text{ ₹ } 560.90$$

$$= \text{ ₹ } 39.10$$

$$\begin{array}{r} \textcircled{5} \textcircled{9} \textcircled{9} \quad \textcircled{10} \\ \text{₹ } 600.00 \\ - \text{ ₹ } 560.90 \\ \hline \text{₹ } 39.10 \end{array}$$

$$(d) \text{ ₹ } 900.30 - \text{ ₹ } 780.50$$

$$= \text{ ₹ } 119.80$$

$$\begin{array}{r} \textcircled{8} \textcircled{9} \textcircled{9} \quad \textcircled{13} \\ \text{₹ } 900.30 \\ - \text{ ₹ } 780.50 \\ \hline \text{₹ } 119.80 \end{array}$$

$$3. \text{ Total money spent by Raja} = \text{ ₹ } 350.50 + \text{ ₹ } 58.75$$

$$= \text{ ₹ } 409.25$$

$$\begin{array}{r} \textcircled{1} \quad \textcircled{1} \\ \text{₹ } 350.50 \\ + \text{ ₹ } 58.75 \\ \hline \text{₹ } 409.25 \end{array}$$

So, Raja spent ₹ 409.25 in total.

$$4. \text{ Total money spent} = \text{ ₹ } 125.00 + \text{ ₹ } 35.50$$

$$= \text{ ₹ } 160.50$$

$$\begin{array}{r} \textcircled{1} \\ \text{₹ } 125.00 \\ + \text{ ₹ } 35.50 \\ \hline \text{₹ } 160.50 \end{array}$$

$$\therefore \text{ Money left with Mohini} = \text{ ₹ } 400.00 - \text{ ₹ } 160.50$$

$$= \text{ ₹ } 239.50$$

$$\begin{array}{r} \textcircled{3} \textcircled{9} \textcircled{9} \quad \textcircled{10} \\ \text{₹ } 400.00 \\ - \text{ ₹ } 160.50 \\ \hline \text{₹ } 239.50 \end{array}$$

So, money left with Mohini is ₹ 239.50.

$$5. \text{ Total money spent by my mother}$$

$$= \text{ ₹ } 225.50 + \text{ ₹ } 42.75 + \text{ ₹ } 128.80$$

$$= \text{ ₹ } 397.05$$

$$\begin{array}{r} \textcircled{1} \textcircled{2} \\ \text{₹ } 225.50 \\ \text{₹ } 42.75 \\ + \text{ ₹ } 128.80 \\ \hline \text{₹ } 397.05 \end{array}$$

So, my mother spent ₹ 397.05 in all.

$$\begin{array}{r}
 6. \text{ Total money spent} = ₹ 402.50 + ₹ 282.50 + ₹ 42.50 \\
 = ₹ 727.50
 \end{array}$$

$$\begin{array}{r}
 \textcircled{1} \textcircled{1} \\
 ₹ 402.50 \\
 ₹ 282.50 \\
 + ₹ 42.50 \\
 \hline
 ₹ 727.50
 \end{array}$$

So, I spent ₹ 727.50.

$$\begin{array}{r}
 \text{Money got back by me} = ₹ 1000 - ₹ 727.50 \\
 = ₹ 272.50
 \end{array}$$

$$\begin{array}{r}
 \textcircled{1} \textcircled{9} \textcircled{9} \textcircled{9} \textcircled{10} \\
 ₹ 1000.00 \\
 - ₹ 727.50 \\
 \hline
 ₹ 272.50
 \end{array}$$

The money got back by me is ₹ 272.50.

### Exercise-3

$$\begin{array}{r}
 1. \text{ The cost of 4 calculators} = 4 \times ₹ 415.50 \\
 = ₹ 1662.00
 \end{array}$$

$$\begin{array}{r}
 \textcircled{1} \textcircled{2} \textcircled{2} \\
 ₹ 415.50 \\
 \times 4 \\
 \hline
 ₹ 1662.00
 \end{array}$$

$$\begin{array}{r}
 2. \text{ Earning of Rajat in a month} = 4 \times ₹ 1175.50 \\
 = ₹ 4702.00
 \end{array}$$

$$\begin{array}{r}
 \textcircled{3} \textcircled{2} \textcircled{2} \\
 ₹ 1175.50 \\
 \times 4 \\
 \hline
 ₹ 4702.00
 \end{array}$$

$$\begin{array}{r}
 3. \text{ The cost of one shirt} \\
 = ₹ 960.40 \div 4 \\
 = ₹ 240.10
 \end{array}$$

$$\begin{array}{r}
 240.10 \\
 4 \overline{) 960.40} \\
 \underline{-8} \phantom{00} \\
 16 \phantom{00} \\
 \underline{-16} \phantom{00} \\
 004 \\
 \underline{-4} \phantom{00} \\
 00 \\
 \underline{-00} \\
 0
 \end{array}$$

∴ Each shirt costs ₹ 240.10.

$$\begin{array}{r}
 4. \text{ The cost of one bedsheet} \\
 = ₹ 1260.60 \div 6 \\
 = ₹ 210.10
 \end{array}$$

$$\begin{array}{r}
 210.10 \\
 6 \overline{) 1260.60} \\
 \underline{-12} \phantom{00} \\
 06 \\
 \underline{-6} \phantom{00} \\
 006 \\
 \underline{-6} \phantom{00} \\
 00 \\
 \underline{-00} \\
 0
 \end{array}$$

∴ Each bedsheet costs ₹ 210.10.

$$\begin{array}{r}
 5. \text{ The total cost of 15 balls} \\
 = 15 \times ₹ 28.20 \\
 = ₹ 423.00
 \end{array}$$

$$\begin{array}{r}
 ₹ 28.20 \\
 \times 15 \\
 \hline
 14100 \\
 + 28200 \\
 \hline
 ₹ 423.00
 \end{array}$$

So, 15 balls cost ₹ 423.00.

6. The cost of 1 kg mangoes = ₹ 450 ÷ 10  
 = ₹ 45

So, the cost of 1 kg mangoes is ₹ 45.00.

$$\begin{array}{r} 45 \\ 10 \overline{) 450} \\ \underline{- 40} \\ 50 \\ \underline{- 50} \\ 0 \end{array}$$

### Exercise-4

1. (a) S.P. > C.P., there is a profit.

$$\text{Profit} = \text{S.P.} - \text{C.P.} = ₹ 230 - ₹ 170 = ₹ 60$$

(b) C.P. > S.P., there is a loss.

$$\text{Loss} = \text{C.P.} - \text{S.P.} = ₹ 425 - ₹ 391 = ₹ 34$$

(c) C.P. > S.P., there is a loss.

$$\text{Loss} = \text{C.P.} - \text{S.P.} = ₹ 1025 - ₹ 975 = ₹ 50$$

(d) S.P. > C.P., there is a profit.

$$\text{Profit} = \text{S.P.} - \text{C.P.} = ₹ 1640 - ₹ 1460 = ₹ 180$$

2. (a) S.P. = C.P. + Profit = ₹ 185 + ₹ 27 = ₹ 212

(b) S.P. = C.P. - Loss = ₹ 670 - ₹ 40 = ₹ 630

3. (a) C.P. = S.P. + Loss = ₹ 994 + ₹ 51 = ₹ 1045

(b) C.P. = S.P. - Profit = ₹ 1825 - ₹ 75 = ₹ 1750

4. S.P. of water purifier = ₹ 1530

C.P. of water purifier = ₹ 1455

Since, S.P. > C.P., there is a profit.

$$\text{Profit} = \text{S.P.} - \text{C.P.} = ₹ 1530 - ₹ 1455 = ₹ 75$$

Thus, Prince made a profit of ₹ 75.

5. C.P. of almirah = ₹ 14,560, Loss = ₹ 405

∴ S.P. of almirah = C.P. - Loss

$$= ₹ 14560 - ₹ 405$$

$$= ₹ 14,155$$

Thus, the selling price of the almirah is ₹ 14,155.

### Mental Maths Corner

1. 2725

2. 11140

3. 8.15

4. 218.50

5. cost price

6. 36

7. ₹ 100

$$\begin{aligned} \therefore \text{Profit} &= \text{S.P.} - \text{Total C.P.} \\ &= ₹ 1000 - ₹ (810 + 90) = ₹ 1000 - ₹ 900 = ₹ 100 \end{aligned}$$

### Review Exercise

1. ₹ 100 - ₹ 68.50 = ₹ 31.50

Thus, Suman got back ₹ 31.50.

$$\begin{array}{r} \textcircled{0} \textcircled{9} \textcircled{9} \textcircled{10} \\ ₹ \cancel{1} \cancel{0} \cancel{0} . \cancel{0} \cancel{0} \\ - ₹ \quad 68.50 \\ \hline ₹ \quad 31.50 \end{array}$$

2. Selling price of the table = C.P. - Loss  
 $= ₹ 725 - ₹ 58$   
 $= ₹ 667$

Thus, the selling price of the table is ₹ 667.

3. S.P. = ₹ 1200, C.P. = ₹ 1155

Since, S.P. > C.P., there is a profit.

$$\text{Profit} = \text{S.P.} - \text{C.P.} = ₹ 1200 - ₹ 1155 = ₹ 45$$

Thus, the profit is ₹ 45.

4. C.P. of motorbike = ₹ 12,550

$$\text{Overhead expenses} = ₹ 640$$

$$\text{Total C.P.} = ₹ 12,550 + ₹ 640 = ₹ 13,190$$

$$\text{S.P.} = ₹ 13,500$$

Since, S.P. > C.P., there is a profit.

$$\text{Profit} = \text{S.P.} - \text{C.P.} = ₹ 13,500 - ₹ 13,190 = ₹ 310$$

Thus, the man makes a profit of ₹ 310.

5. Cost of one shirt = ₹ 750.00 ÷ 6  
 $= ₹ 125.00$

Thus, the cost of one shirt is ₹ 125.00.

$$\begin{array}{r} 125.00 \\ 6 \overline{) 750.00} \\ \underline{-6} \phantom{00} \\ 15 \phantom{00} \\ \underline{-12} \phantom{00} \\ 30 \phantom{00} \\ \underline{-30} \phantom{00} \\ 00 \phantom{00} \\ \underline{-00} \phantom{00} \\ 00 \phantom{00} \\ \underline{-00} \phantom{00} \\ 0 \end{array}$$

6. Total money spent by Arushi = ₹ 35.50 + ₹ 40.00 + ₹ 68.00  
= ₹ 143.50

$$\begin{array}{r} \textcircled{1} \\ \text{₹ } 35.50 \\ \text{₹ } 40.00 \\ + \text{₹ } 68.00 \\ \hline \text{₹ } 143.50 \end{array}$$

Thus, Arushi spends ₹ 143.50.

7. On dividing 2214 by 9, we get 246 as the quotient.

$$2214 \div 9 = 246$$

$$\begin{array}{r} 246 \\ 9 \overline{) 2214} \\ \underline{-18} \phantom{00} \\ 41 \phantom{00} \\ \underline{-36} \phantom{00} \\ 54 \phantom{00} \\ \underline{-54} \phantom{00} \\ 0 \end{array}$$

Thus, each person gets ₹ 246.

8. Cost of 1kg of rice = ₹ 43.50

∴ Cost of 12kg of rice =  $12 \times ₹ 43.50$   
= ₹ 522.00

$$\begin{array}{r} \text{₹ } 43.50 \\ \times 12 \\ \hline \text{₹ } 522.00 \end{array}$$

Thus, the cost of 12 kg of rice is ₹ 522.00.

9. C.P. of motorbike = ₹ 32,550

Overhead expenses = ₹ 1575

Total C.P. = ₹ 32,550 + ₹ 1575  
= ₹ 34,125

Profit = ₹ 2,255

∴ S.P. = C.P. + Profit  
= ₹ 34,125 + ₹ 2,255  
= ₹ 36,380

Thus, the selling price of the motorbike is ₹ 36,380.