

CHAPTER – 1

THE FISH TABLE

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Question 1: These log boats do not go very far. If the wind is helpful, they travel about 4 km in one hour.

- How long will they take to go a distance of 10 km?
- Guess how far you can go in one hour if you walk fast.

Answer:

- Distance covered by log boat in 1 hour = 4 km

Distance covered by log boat in $\frac{1}{2}$ hour (30 minutes) = 2 km

Distance to be travelled = 4 km + 4 km + 2 km

Time taken to travel 10 km = 1 h + 1 h + $\frac{1}{2}$ h = $2\frac{1}{2}$ h

Thus, the log boat covers 10 km in $2\frac{1}{2}$ hours.

Disclaimer: The answer may vary from student to student, based on his/her observation. It is highly recommended that the students prepare the answer on their own.

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Question 1: Find out Look at the sun and find out the direction from where it rises.

- From where you are, what interesting thing do you see to your east?
- Name two things that are lying to your west.

Answer:

Disclaimer: The purpose of this section is to make students observe their surroundings. The answer may vary from student to student, based on his/her observation. It is highly recommended that the students prepare the answer on their own.

Question 2: Some boats have motors and go further into the sea. Since they go far out they can catch more fish. These boats travel faster, at the speed of about 20 km in one hour.

- How far would the motor boats go in three and a half hours?
- How much time will they take to go 85 km?

Answer:

- Distance covered by boat in 1 hour = 20 km

Distance covered by boat in $\frac{1}{2}$ hour = 10 km

Distance covered by boat in $3\frac{1}{2}$ hours = 20 km + 20 km + 20 km + 10 km

So, the boat can cover 70 km in $3\frac{1}{2}$ hours.

- Total distance to be travelled by boat = 20 km + 20 km + 20 km + 20 km + 5 km

Distance covered by boat in $\frac{1}{4}$ hours = 5 km

Time taken to travel 85 km = 1 h + 1 h + 1 h + 1 h + $\frac{1}{4}$ h = $4\frac{1}{4}$ h

They will take $4\frac{1}{4}$ h to go 85 km.

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Question 1: Write a news report about the dangers faced by the fishes in our rivers and seas.

Answer:

Disclaimer: *Students are advised to prepare the answer on their own.*

Question 2: Which Boat Gets How Much? In one trip the log boat brings about 20 kg of fish. But other types of boats bring a bigger catch as given in the table. The table also shows the speed of each type of boat, which is how far each boat goes in one hour. Look at the table and calculate

- (a) About how much fish in all will each type of boat bring in seven trips?
- (b) About how far can a motor boat go in six hours?
- (c) If a long tail boat has to travel 60 km how long will it take?

<i>Type of boat</i>	<i>Catch of fish in one trip (in kg)</i>	<i>Speed of the boat (how far it goes in one hour)</i>
Log boat	20	4 km per hour
Long tail boat	600	12 km per hour
Motor boat	800	20 km per hour
Machine boat	6000	22 km per hour

Answer:

(a) In 1 trip, log boat can catch 20 kg of fish Weight of fish that log boat can catch in 7 trips = $20 \text{ kg} \times 7 = 140 \text{ kg}$

So, a log boat can catch 140 kg of fish in 7 trips.

In 1 trip, long tail boat can catch 600 kg of fish. Weight of fish that long tail boat can catch in 7 trips = $600 \times 7 = 4200$ kg

So, a long tail boat can catch 4200 kg of fish in 7 trips.

In 1 trip, motor boat can catch 800 kg of fish. Weight of fish that motor boat can catch in 7 trips = $800 \times 7 = 5600$ kg

So, a motor boat can catch 5600 kg of fish in 7 trips.

In 1 trip, a machine boat can catch 6000 kg of fish. Weight of fish that machine boat can catch in 7 trips = $6000 \times 7 = 42000$ kg

So, machine boat can catch 42000 kg of fish in 7 trips.

(b) Speed of motor boat = 20 km per hour Distance covered by motor boat in 1 hour = 20 km So, distance covered by motor boat in 6 hours = $20 \text{ km} \times 6 = 120 \text{ km}$

(c) Speed of long tail boat = 12 km per hour

Distance covered by long tail boat in 1 hour = 12 km

Distance to be travelled by long tail boat = $12 \text{ km} + 12 \text{ km} + 12 \text{ km} + 12 \text{ km} + 12 \text{ km}$

Time taken by long tail boat to cover 60 km = $1 \text{ h} + 1 \text{ h} + 1 \text{ h} + 1 \text{ h} + 1 \text{ h} = 5 \text{ h}$

So, long tail boat takes 5 hours to cover a distance of 60 km.

Page No 10:

Question 1: What other things have you heard of in lakhs?

Answer:

The cost of cars, televisions, gold and jewellery can also be in lakhs at times.

Disclaimer: *The answer may vary from student to student. The answer provided here is for reference only.*

Question 2: Write the number one thousand. Now write one hundred thousand. So how many zeroes are there in the number one lakh? Easy, isn't it?

Answer:

One thousand can be written as 1,000. One hundred thousand = 1,00,000. One hundred thousand in International system of numeration is one lakh in Indian system of numeration.

So, there are 5- zeroes in 1,00,000.

Question 3: There are about two lakh boats in our country. Half of them are without a motor. What is the number of boats with a motor? Write it.

Answer:

Total number of boats in the country = 2,00,000 As half of it are motor-boats, the remaining half will be without motor.

Therefore, number of boats without motor = $200,000 \div 2 = 1,00,000$

Question 4: About one fourth of the boats with a motor are big machine boats. How many thousand machine boats are there? Come on, try to do it without writing down.

Answer:

Total boats in the country = 2,00,000

Number of boats with a motor = $200,000 - 100,000 = 1,00,000$

Number of machine boats = One-fourth of the boats with motor

So, number of machine boats = $100,000 \div 4 = 25,000$

There are 25,000 machine boats.

Question 5: Where have you heard of a crore? What was the number used for?

Answer:

We have heard of a crore in real estate, where a flat can cost about 1 crore. It can also be heard in box-office, where movies can earn crores of rupees.

Question 6: Try writing the number one crore. Don't get lost in all the zeroes!

Answer:

One crore is written as 1,00,00,000.

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Question 1: Mini • “Come here! Come here! Take sardines at Rs 40 a kg”.

Gracy • “Never so cheap! Get sword-fish for Rs 60 a kg”. Floramma sells prawns for Rs 150 a kg. Karuthamma sells squid for Rs 50 a kg.

Look, Fazila can hardly carry this big kingfish! She says, “This fish weighs 8 kg. I will sell the whole for Rs 1200”.

Practice Time

(1) At what price per kg did Fazila sell the kingfish?

(2) Floramma has sold 10 kg prawns today. How much money did she get for that?

(3) Gracy sold 6 kg sword fish. Mini has earned as much money as Gracy. How many kg of sardines did Mini sell?

(4) Basheer has Rs 100. He spends one-fourth of the money on squid and another three-fourth on prawns. (a) How many kilograms of squid did he buy? (b) How many kilograms of prawns did he buy?

Answer:

(1) Weight of the kingfish = 8 kg Total cost of the kingfish = Rs 1200
Weight of 1 kg fish = $1200 \div 8 = 150$

Fazila sells the kingfish at Rs 150 per kg.

(2) Weight of prawns sold by Floramma = 10 kg Cost of 1 kg prawns = Rs 150
Price of 10 kg prawns = $Rs\ 150 \times 10 = Rs\ 1500$

Floramma got Rs 1500 by selling 10 kg prawns.

(3) Weight of swordfish sold by Gracy = 6 kg Cost of 1 kg swordfish = Rs 60
Total money Gracy earned by selling 6 kg of swordfish = $Rs\ 60 \times 6 = Rs\ 360$

Mini earned Rs 360 by selling sardines.

Cost of 1 kg sardines = Rs 40 Weight of sardines sold by Mini = $360 \div 40 = 9\ kg$

Mini sold 9 kg sardines and earned Rs 360.

(4) Total money with Basheer = Rs 100 One-fourth of the money = $Rs\ 100 \div 4 = Rs\ 25$

Remaining three-fourth of the money = $Rs\ 100 - Rs\ 25 = Rs\ 75$

(a) He bought squid for Rs 25. Cost of 1 kg squid = Rs 50 Now, cost of 12kg squid = $Rs\ 50 \div 2 = Rs\ 25$

Basheer can buy 12kg squid with Rs. 25.

(b) He bought prawns for Rs 75. Cost of 1 kg prawns = Rs 150 Cost of 12kg prawns = $Rs\ 150 \div 2 = Rs\ 75$

Basheer can buy 12kg prawns with Rs. 75.

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Question 1: Women's' Meenkar Bank' The meeting of the Meenkar Bank has just begun. Fazila is the president. Twenty fisherwomen have made their own bank. Each saves Rs 25 every month and puts it in the bank.

- How much money does the group collect each month?
- How much money will be collected in ten years?

Answer:

- Number of fisherwomen who join the bank = 20

Money saved by each of them every month = Rs 25
Total money collected in a month = $\text{Rs } 25 \times 20 = \text{Rs } 500$

Thus, 20 women save Rs 500 every month.

- Now, 1 year = 12 months

10 years = 12 months \times 10 = 120 months

Total money saved in 10 years = $\text{Rs } 500 \times 120 = \text{Rs } 60,000$

Rs 60,000 will be collected in 10 years.

Question 2: Gracy took a loan of Rs 4000 to buy a net. She paid back Rs 345 every month for one year. How much money did she pay back to the Bank?

Answer:

Amount of loan taken by Gracy = Rs 4000
Amount of payment every month = Rs 345

We know, 1 year = 12 months

Total amount paid back to the bank in 1 year = $\text{Rs } 345 \times 12 = \text{Rs } 4,140$

So, Gracy paid Rs 4,140 to bank in 1 year.

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Question 1: Jhansi and her sister took a loan of Rs 21,000 to buy a log boat. They paid back a total of Rs 23, 520 in one year. How much did they pay back every month?

Answer:

1 year = 12 months

Total amount paid back by Jhansi and her sister in 1 year = Rs 23,520

Amount they paid every month = $\text{Rs } 23520 \div 12 = \text{Rs } 1,960$

They paid back Rs 1,960 every month.

Question 2: Fazila writes the things they need to buy to begin. See the table for the cost of each item and the number of items they want to buy. Find the total cost.

<i>Item</i>	<i>Price of each</i>	<i>Number of items</i>	<i>Cost</i>
Bode well for fresh water	Rs 3000	1	
Bamboo rack for fish drying	Rs 2000	20	
Cement tank	Rs 1000	4	
Tray and knife	Rs 300	20	
Bucket	Rs 75	20	

Total cost to set up the factory = _____

When fresh fish is dried it becomes $\frac{1}{3}$ its weight. In one month they plan to dry 6000 kg of fresh fish. How much dried fish will they get in a month?

Answer:

<i>Item</i>	<i>Price of each</i>	<i>Number of items</i>	<i>Cost</i>
Bore well for fresh water	Rs 3000	1	Rs 3000
Bamboo rack for fish drying	Rs 2000	20	Rs 40000
Cement tank	Rs 1000	4	Rs 4000
Tray and knife	Rs 300	20	Rs 6000
Bucket	Rs 75	20	Rs 1500

Total cost to set up the factory = Rs 3000 + Rs 40000 + Rs 4000 + Rs 6000 + Rs 1500 = Rs 54,500

Weight of fresh fish = 6000 kg Weight of dried fish = $6000 \text{ kg} \div 3 = 2000 \text{ kg}$

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Question 1: Floramma • Let us first calculate for 6 kg of fresh fish.

We buy fresh fish for	Rs 15 per kg
We sell dried fish for	Rs 70 per kg

We dry 6 kg fresh fish to get _____ kg dried fish

For 6 kg fresh fish we have to pay $6 \times \underline{\hspace{1cm}} = \text{Rs } 90$

We will sell 2 kg dried fish and get $2 \times \underline{\hspace{1cm}} = \text{Rs } \underline{\hspace{1cm}}$

So if we dry 6 kg fresh fish we will earn $\underline{\hspace{1cm}} - 90 = \text{Rs } \underline{\hspace{1cm}}$

But if we dry 6000 kg we can earn Rs $\underline{\hspace{1cm}} \times 1000$ in one month!

Answer:

We dry 6 kg fresh fish to get 2 kg dried fish.

For 6 kg fresh fish we have to pay $6 \times \underline{\text{Rs } 15} = \text{Rs } 90$

We will sell 2 kg dried fish and get $2 \times \underline{\text{Rs } 70} = \text{Rs } \underline{140}$

But if we dry 6000 kg we can earn Rs 50 $\times 1000$ in one month!

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Question 1: Jhansi

• I found that for 6000 kg fish we would need 1500 kg salt every month!
Its price is Rs 2 per kg. Monthly costs:

(a) Salt $1500 \times 2 = \text{Rs } \underline{\hspace{1cm}}$

(b) Packing and bus charges = Rs 3000 So the total monthly cost of drying and selling the fish = Rs $\underline{\hspace{1cm}}$

Fazila

• That sounds very good! Our calculations tell us that every month our Bank will earn Rs 44,000!

• Check to see if you also get the same answer.

Answer:

(a) Monthly cost of salt = $1500 \times 2 = \text{Rs } \underline{3,000}$

(b) Cost of 1 kg of fresh fish = Rs 15 Cost of 6000 kg of fresh fish = Rs $15 \times 6000 = \text{Rs } 90,000$

Total cost = Cost of fresh fish + Cost of packaging and bus charges + Cost of salt = Rs 90000 + Rs 3000 + Rs 3000 = Rs 96,000

Now, weight of dried fish is one-third of the weight of fresh fish. So, weight of dried fish = $6000 \text{ kg} \div 3 = 2000 \text{ kg}$

Selling price of dried fish = Rs 70 Money earned by selling 2000 kg of fish = Rs $70 \times 2000 = \text{Rs } 1,40,000$

Cost of drying and selling the fish = Money earned by selling the fish – Total cost = Rs 140000 – Rs 96000 = Rs 44,000