

I B Patel English School (Primary) 2020 - 2021 Class - 5

EXERCISE

Subject - Mathematics

Chapter – 1 (Our National Fruit - Mango)

Answers of page – 3

1) How many kilograms do you weigh?

Ans. 18 boxes × 12kg = 216 kg

2) What is the approximate total weight of 12 students like you together?

Ans. If weight of 1 student = 15 kg, then $12 \times 15 = 180 \text{ kg}$

3) Compare the total weight of 12 students with the weight of total mangoes picked from this orchard, which one is less?

Ans. Total weight of students = 180 kg

Total weight of mangoes = 216 kg

So, the weight of students is less.

4) If 5 kg mangoes are consumed at our home every week and if each kg will cost ₹ 75, how many kg of mangoes will be required for one month? What will be the cost of it?

Ans. For one week = 5 kg mangoes

For 1 month = 4 weeks = $5 \times 4 = 20$ kg

Cost of 1 kg = ₹ 75, so total cost = 20 kg × ₹ 75 = ₹ 1500

5) If the mango season continues for 3 months and you eat mangoes regularly, give an estimate of mangoes required and its cost during the season.

Ans. For 1 month = 20 kg, so for 3 months = $20 \times 3 = 60$ kg

Cost of 1 kg = ₹ 75, so cost of 60 kg mangoes = 75 × 60 = ₹ 4500

How much time will it take to cover the distance of 10 kilometers?
 Ans : 1 hour = 60 minutes

4 km = 60 min (1 hour) $10 \text{ km} = 10 \times 60$ = 150 minutes 60 minutes = 1 hour $150 \text{ minutes} = 150 \div 60$ = 2 hours 30 min

2) Guess, how much distance, do you cover in an hour by walking fast?

Ans. Depends on a person.

Answers of page – 7

1) How much distance can a tractor cover at the speed of same speed in 3 hours?

Ans. 1 hour = 20 km , so 3 hours = $3 \times 20 = 60$ km

2) How much time it will take to cover the distance of 85 kilometers?

Ans. 20 km = 1 hour , so 1 km = $\frac{1}{20}$ hour = $\frac{60}{20}$ minutes = 3 minutes

 $85 \text{ km} = 85 \times 3 = 255 \text{ minutes} = 4 \text{ hours } 15 \text{ minutes}$

Answers of page – 9

Type of vehicle	Transportation of mangoes in a trip	Speed of vehicle (distance covered in km in one hour)
Bullock-cart	200	4
Rickshaw-trailor	600	12
Tractor	800	20
Truck	6000	44

1) How many kg mangoes, each vehicle can transport in its seven trips?

Ans. Bullock-cart = $200 \times 7 = 1400$ kg mangoes

Rickshaw-trailor = $600 \times 7 = 4200$ kg mangoes

Tractor = $800 \times 7 = 5600$ kg mangoes

Truck = $6000 \times 7 = 42000$ kg mangoes

2) How much distance is covered by a tractor in six hours?

Ans. In 1 hour Tractor can cover = 20 km, so in 6 hours = 20 x 6 = 120 km

3) How much time will be taken by a rickshaw-trailor to cover 60 kilometers?

Ans. To cover 12 km, it takes 1 hour. So, to cover 60 km, it will take $1 \times 5 = 5$ hours.

Answers of page – 10

1) Have you learned something else about the number lakh?

Ans. Different answers

2) Write one thousand in number. Now write 100 thousands in number. How zeros are there in one lakh?

Ans. One thousand = 1000

100 thousands = 1,00,000

There are 5 zeros in one lakh.

3) If there are 2 lakhs transportation vehicle in your area and half of them are trucks, write number of trucks in your area.

Ans. Half of 2 lakhs = 1 lakh

So, there are 1 lakh trucks in our area.

4) If one fourth part of these vehicles are tractors, how many thousand of tractors are there?

Ans. One fourth of 2 lakh = $\frac{1}{4} \times 2,00,000 = 50,000$ tractors

5) Where have you heard about one crore? How is this number used?

Ans. Different answers

6) Write the number one crore.

Ans. 1,00,00,000

1) At what price per kg, does Jaydeepsinh sell his Kesar mangoes?

Ans. Cost of 8 kg mangoes = ₹ 1200

Cost of 1 kg mangoes = $\frac{1200}{9}$ = ₹ 150

So, he will sell mangoes at ₹ 150 per kg.

- 2) Today Madhuben has sold 10 kg Kesar mangoes. How much did she earn from that?
- Ans. She is selling Kesar mangoes at rate ₹ 150 per kg.

So, total earning of 10 kg mangoes = 150 × 10 = ₹ 1500

3) Mahipatbhai has sold 6 kg Alphonso mangoes. Savjibhai has earned the same amount as Mahipatbhai. How many kg of Totapuri mangoes have been sold by Savjibhai?

Ans. Mahipatbhai is selling at the rate of ₹ 60 per kg. So, for 6 kg mangoes he would earn

= 60 × 6 = ₹ 360

Savjibhai is selling at the rate of ₹ 40 per kg and earning same amount as Mahiparbhai i.e. ₹ 360.

So, Savjibhai sold = $\frac{360}{40}$ = 9 kg mangoes.

4) Raj has ₹ 100. He spent fourth part of the amount to buy Langdo mango. He spent rest of three fourth amount to buy Kesar mangoes.
(a) How many kg Langdo mango he had bought?

Ans. One fourth of ₹ 100 = $\frac{1}{4}$ × 100 = ₹ 25, so he had bought half kg of Langdo mango.

(b) How many kg Kesar mango he had bought?

Ans. Three fourth of Rs $100 = \frac{3}{4} \times 100 = ₹$ 75, so he had bought half kg of Kesar mango.

1) How many rupees are collected by this group in every month?

Ans. There are 20 members and each member saves ₹ 25 per month so, 20 × 25 = ₹ 500 will be collected every month.

2) How many rupees will be collected in 10 years?

Ans. In 1 year = 12 months = 12 × 500 = ₹ 6000

In 10 years = 10 × 6000 = ₹ 60000

(a) Rekha borrowed a loan of ₹ 4000/-. She paid ₹ 345 to bank every month for a year. How many rupees did she pay to the bank? How many rupees are yet to be paid?

Ans. She paid ₹ 345 per month. So, total amount she paid = 345 × 12 = ₹ 4140

She took loan of ₹ 4000. So, no money is left to be paid to the bank.

(b) Mira and her brother borrowed a loan of ₹ 21,000/- to buy new plants of grafted mango-trees. They paid back ₹ 23,520/- in a year. How many rupees they would have paid every month?

Ans. They paid ₹ 23,520 in 1 year (12 months). So, each month they would have paid = $\frac{23,520}{12} = ₹$ 1960.

Item	Cost for item	No. of items	Expense
Mixer-Grinder	₹ 3000	1	₹ 3000
Thermocol-ice-box	₹ 2000	20	₹ 40000
for preserving and			
transporting			
mango-pulp			
Big pots	₹ 1000	4	₹ 4000
Tray and knife	₹ 300	20	₹ 6000
Bucket	₹75	20	₹ 1500

Answers of page – 14

Total expenditure to start a business = 54,500

- When they extract pulp from mango, it weighs $\frac{1}{3}$ of a mango.
- They have planned to extract pulp from 6000 kg mangoes in a month.
 1) How much mango pulp will be prepared in a month?

Ans. $\frac{1}{3}$ of 6000 mangoes = $\frac{1}{3} \times 6000$ = 2000 kg pulp will be prepared in a month.

Answers of page – 14

For purchase of mangoes	₹15 per kg
For sale of mango-pulp	₹70 per kg

1) If we extract mango-pulp from 6 kg mangoes, we get _____ kg pulp.

Ans. $\frac{1}{3}$ of 6 mangoes = $\frac{1}{3} \times 6 = 2$ kg pulp

The total amount to be paid for 6 kg mangoes 6 × _____ = ₹ 90

Ans. 6 kg mangoes × Rs 15 per kg = ₹ 90.

Amount received by selling 2 kg mango pulp 2 x _____ = ₹ _____

Ans. 2 kg mango-pulp ×Rs 70 per kg = ₹ 140

4) Therefore, the amount by selling the pulp prepared from 6 kg mangoes = ₹
 _____ - ₹ 90 = ₹ _____

Ans. 6 kg mangoes = 2 kg mango-pulp

Total amount = 2 kg mango-pulp × ₹ 70 per kg = ₹ 140

₹ **140** – ₹ 90 = ₹ 50

 If we prepare mango-pulp of 6000 kg mangoes, the amount we earn _____ × ₹ 1000

Ans. 6000 kg mangoes = 2000 kg pulp prepared

Total amount = 2000 kg mango-pulp × ₹ 70 per kg = ₹ 1,40,000

= **140** × ₹ 1000

Monthly expense

- 1) Ice 1500 × ₹ 2 = ₹ _____
- Ans. 1500 × 2 = ₹ **3000**
- 2) Packaging charge and rickshaw fare = ₹ 3000
 So, the total monthly expense of buying mangoes and selling mango-pulp is ₹

Total expense = Buying and selling mango pulp + Ice charge + Packaging and Rich-shaw charge

= 1,40,000 + 3000 + 3000 = 1,46,000