

**NCERT Solutions for Class 5 Maths Chapter 13:** NCERT Solutions for Class 5 Maths Chapter 13, "Ways to Multiply and Divide," provide detailed explanations and step-by-step solutions to help students understand various methods of multiplication and division.

This chapter covers a range of techniques, including the traditional long multiplication and division methods, as well as more creative approaches like breaking numbers into smaller parts (distributive property) and using visual aids.

These solutions aim to enhance students' problem-solving skills and build a strong foundation in basic arithmetic operations, ensuring they can tackle more complex mathematical problems in the future.

## **NCERT Solutions for Class 5 Maths Chapter 13 PDF**

You can find the NCERT Solutions for Class 5 Maths Chapter 13 "Ways to Multiply and Divide" in PDF format by clicking the link below. This PDF has helpful explanations and step-by-step solutions to learn different methods of multiplication and division easily.

It covers techniques like long multiplication and division, as well as fun ways to understand these concepts using pictures and examples. With this PDF, you can practice and improve your math skills at your own pace.

### **NCERT Solutions for Class 5 Maths Chapter 13 PDF**

## **NCERT Solutions for Class 5 Maths Chapter 13 Ways to Multiply and Divide**

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### **Manirathinam – The Cashier**

**1. Maniratnam is the cashier of king Jayan. His job is to find out the salary of all the people who work for the king. This chart shows how much salary each person gets in a day.**

| <b>Person</b>      | <b>Salary in a day</b> |
|--------------------|------------------------|
| <b>Minister</b>    | <b>Rs 195</b>          |
| <b>Horse rider</b> | <b>Rs 76</b>           |
| <b>Cook</b>        | <b>Rs 65</b>           |

**Maniratnam wanted to calculate the salary of the cook for the month of January. He wrote**

**Rupees  $1800 + 150 + 60 + 5 = \text{Rs } \underline{\hspace{2cm}}$**

**Answer:**

Rupees  $1800 + 150 + 60 + 5 = \text{Rs } (1950 + 65) = \text{Rs } 2015$

**2. Maniratnam's daughter Bela has learnt another method to multiply. She wrote like this and showed it to Bhanu, her brother.**

**Answer:**

**3. Now Bhanu tried to find the salary of a minister for the month of January. He wanted to multiply  $195 \times 31$ .**

**Answer:**

**Practical time**

**1. Use Bela's method to multiply these numbers.**

**a)  $32 \times 46$  b)  $67 \times 18$**

**Answer:**

a)  $32 \times 46 = 1472$  b)  $67 \times 18 = 1206$

**2) Do these in your notebook using Bela's method.**

**a)  $47 \times 19$  b)  $188 \times 91$**

**c)  $63 \times 57$  d)  $225 \times 22$**

**e)  $360 \times 12$  f)  $163 \times 42$**

**Answer:**

**Shantaram a Special Cook**

**1. Shantaram is a special cook who comes only on party days. Last year he was called for only 28 days. For each day he has to be paid Rs 165. Find out how much money he will get in all.**

**Answer:**

Given,

Salary paid to Shantaram for 1 day = Rs 165

So, the salary paid to Shantaram for 28 days = Rs  $165 \times 28$

Hence, the money Shantaram gets in all is Rs 4620.

**2. If he is called for all days of the year, how much salary will he get?**

**Answer:**

Thus, the cook will get a salary of Rs 60,225

**3. Now find the salaries of the minister and horse rider for 1 year.**

**Answer:**

The salary paid to the minister for 1 day = Rs 195

So, the salary paid to the minister for 365 days = Rs  $195 \times 365$

Hence, the salary of the minister for 1 year is Rs 71,175

And,

The salary paid to the horse rider for 1 day = Rs 95

So, the salary paid to the horse rider for 365 days =  $365 \times$  Rs 95

Hence, the salary of the minister for 1 year is Rs 34,675

**Years and Years**

**(a) Sohan drinks 8 glasses of water every day.**

- How many glasses will he drink in one month? \_\_\_\_\_
- How many glasses will he drink in one year?
- If 125 people living in a colony drink 8 glasses of water in a day, how much water will they drink in a year?

**Answer:**

The number of glasses of water Sohan drinks everyday = 8

We know that, 1 months – 30 days

So, the number of glasses of water consumed by Sohan =  $8 \times 30$

Hence, Sohan will drink 240 glasses of water in one month.

Now, we know 1 year = 365 days

So, the number of glasses of water consumed by Sohan in 365 days =  $365 \times 8$

Hence, Sohan will drink 2,920 glasses of water in one year.

We have, the number of glasses of water consumed by 1 person for a year = 2,920

So, the number glasses of water consumed by 125 people of the colony for one year =  $2920 \times 125$

Therefore, 125 people of the colony will drink 3, 65,000 glasses of water in one year.

**(b) If Soha's heart beats 72 times in one minute, how many times does it beat in one hour?**

- Now find out how many times it beats in one day.
- Count your own heart beats to find out how many times your heart beats in one week.

**Answer:**

The number of times Soha's heart beats in one minute = 72

We know, 1 hour = 60 minutes

So, the number of times Soha's heart beats in one hour =  $72 \times 60$

Hence, Soha's heart beats 4,320 times in one hour.

Now, we know one day has 24 hours.

So, the number of times Soha's heart beats in a day =  $4320 \times 24$

Hence, the number of times Soha's heart beat in a day is 1, 03,680.

Next,

My heart beats 72 times in a minute. We know, 1 week has 7 days.

So, the number of times my heart beats in one week =  $1, 03,680 \times 7$

Hence, the number times my heart beats in a week is 7, 25,760.

**(c) A baby elephant drinks around 12 L of milk every day. How much milk will it drink in two years?**

**Answer:**

The number of litres of milk the baby elephant drinks in a day = 12 L

We know, number of days in a year = 365

And the number of days in two years =  $365 \times 2 = 730$

So, the number of litres of milk the baby elephant drinks in two years =  $12 \times 730$

Hence, the number of litres of milk the baby elephant will consume in two years is 8,760.

**(d) A baby blue whale drinks around 200 L of milk in one day. Just imagine how much milk that is! Find out in how many days your family would use 200 L milk. How much milk would the baby blue whale drink in eight months?**

**Answer:**

Number of litres of milk a baby blue whale drinks in one day = 200

Number of litres of milk used in my family in one day = 2

So, the number of days for consuming 200 L of milk by my family =  $200/2 = 100$  days

Now,

We know 1 month = 30 days then, 8 months =  $30 \times 8 = 240$  days

So, the number of litres of milk the baby blue whale will drink in eight months =  $200 \times 240$

Hence, the baby blue whale will consume 48,000 L of milk in eight months.

**2. He bought field (A) at the rate of Rs 95 for a square metre, field**

**(B) at Rs 110 for a square metre and field (C) at Rs 120 for a square metre.**

**Find the cost of all three fields.**

**Answer:**

Cost of 1 square metre of field A = Rs 95

So, the cost of 756 square metre of field A = Rs  $(756 \times 95)$

Thus, the cost of field A is Rs 71,820

Cost of 1 square metre of field B = Rs 110

So, the cost of 432 square metre of field B = Rs  $(432 \times 110)$

Thus, the cost of field B is Rs 47,520

Cost of 1 square metre of field C = Rs 120

So, the cost of 513 square metre of field C = Rs  $(756 \times 95)$

Thus, the cost of field C is Rs 61,560

Now,

The total cost of all the fields = Rs 71,820 + Rs 47,520 + Rs 61,560 = Rs 1, 80,900

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**Thulasi and her husband work on Karunya's farm. The Government has said that farm workers should be paid at least Rs 71 for one day's work. But he pays Rs 55 to Thulasi and Rs 58 to her husband.**

**If Thulasi works for 49 days, how much money does she get? \_\_\_\_\_**

**If her husband works for 42 days, how much money does he get? \_\_\_\_\_**

**Find the money they earn together \_\_\_\_\_**

**Answer:**

Thulasi is paid Rs 55 for one day's work.

So, if she works for 49 days, she will get = Rs  $55 \times 49$

Thus, Thulasi will get Rs 2,695 for working 49 days in the farm.

Thulasi's husband is paid Rs 58 for a day's work.

So, if he works for 42 days, he will get = Rs  $58 \times 42$

Thus, Thulasi's husband will get Rs 2,436 for working 42 days in the farm.

Total money earned by both of them = Rs 2,695 + Rs 2,436 = Rs 5,131

**Satish's story**

**Satish is a 13 year old boy. His father had taken a loan for farming. But the crops failed. Now Satish's mother has to pay Rs 5000 every month for the loan.**

**Satish started working — he looked after 17 goats of the village.**

**He earns Rupee 1 every day for one goat.**

- **How much will he earn in one month?**
- **Does he earn enough to help pay the loan every month?**
- **How much will he earn in one year?**

**Answers:**

Satish earns Rs 1 for one goat every day. He looked after 17 goats of his village.

So, Satish will earn =  $\text{Rs } 1 \times 17 = \text{Rs } 17$  for a day

Hence,

For a month Satish will earn =  $\text{Rs } 17 \times 30$

Thus, Satish will earn Rs 510 in one month.

Satish's mother has to pay Rs 5,000 every month for the loan. But, the earnings of Satish will not help pay the loan every month.

We know, 1 year = 12 months

Satish's earning in one year =  $\text{Rs } 510 \times 12$

Therefore, Satish will earn Rs 6,120 in one year for looking after 17 goats.

**Practice time**

- (a) Sukhi works on a farm. He is paid Rs 98 for one day. If he works for 52 days, how much will he earn?**
- (b) Hariya took a loan to build his house. He has to pay back Rs 2,750 every month for two years. How much will he pay back in 2 years?**
- (c) Ratiram is milk seller in the city. He sells 13 litres of milk everyday at Rs 23 per litre. How much does he earn?**
- (d) A farmer sells 1 litre of milk for Rs 11. In one month he sells 210 litres of milk. How much does he earn in a month?**
- (e) A company sells 1 litre of packed water for Rs 12. A shopkeeper buys 240 litres of packed water. How much does he pay?**

**Answers:**

- (a) Sukhi is paid Rs 98 for working one day on a farm.**

So, his earning if he works 52 days will be = Rs 98 x 52

Hence, Sukhi will earn Rs 5,096 by working in the farm for 52 days.

(b) Hariya pays back Rs 2,750 every month.

She has to pay the amount for a period of 2 years.

2 years = 2 x 12 months = 24 months

So, the money to be paid by Hariya in 24 months = Rs 2,750 x 24

Hence, Hariya will pay back Rs 66,000 in 2 years for the loan.

(c) The earnings of Ratiram by selling 1 litre of milk = Rs 23.

Then, the earnings of Ratiram by selling 13 litres of milk = Rs 23 x 13

Hence, Ratiram earns Rs 299 after selling 13 litre of milk every day.

(d) The farmer sells 1 litre of milk at Rs 11.

So, the earning of selling 210 litres of milk in one month = Rs 11 x 210

Hence, the farmer earns Rs 2,310 in a month by selling milk.

(e) Selling price of 1 litre of packed water = Rs 12

Then, the amount the shopkeeper has to pay for buying 240 litres of packed water = Rs 12 x 240

Hence, the shopkeeper has to pay Rs 2,880 for 240 litres of packed water.

### **Fun with multiplication**

**A) Look for the pattern and take this forward.**

**Answer:**

**B) Each letter a, b, c stands for a number.**

**Take a = 1, then find what the numbers b and c will be.**

**Answer:**

Therefore, we have b = 2 and c = 3.

**C) Tricks with your age.**



Write your age \_\_\_\_\_

Multiply it by 7 \_\_\_\_\_

Again multiply the answer by 13 \_\_\_\_\_

Multiply again that answer by 11 \_\_\_\_\_

Now look at your last answer. Can you find your age in that answer? How many times does your age show in the answer?

Now try this trick with other people.

**Answer:**

Write your age: 10

Multiply it by 7:  $10 \times 7 = 70$

Again multiply the answer by 13:  $70 \times 13 = 910$

Multiply again that answer by 11:  $910 \times 11 = 10010$

Yes, I can find my age in the final answer. My age appears two times in the answer.

**D) Going round and round!**

**Answers:**

Do you find a pattern in all these answers? Discuss this with your friends.

**Answer:**

No, we didn't find any pattern in the answer.

## **Benefits of NCERT Solutions for Class 5 Maths Chapter 13 Ways to Multiply and Divide**

- **Clear Understanding:** The solutions provide clear explanations and step-by-step procedures to help students understand various methods of multiplication and division.
- **Practice Exercises:** The solutions include practice exercises that enable students to reinforce their learning and improve their problem-solving skills.
- **Comprehensive Coverage:** The solutions cover all the topics and concepts of Chapter 13, ensuring that students have a thorough understanding of the chapter.

- **Builds Confidence:** By providing accurate solutions and explanations, the NCERT Solutions help students build confidence in their mathematical abilities.