

## Answers

(1) 744

### Step 1

One dozen oranges means 12 oranges. The athlete eats 2 dozen oranges in a day.

### Step 2

This means that the number of oranges he eats in a day =  $12 \times 2 = 24$  oranges

### Step 3

We know that there are 31 days in the month of July.

### Step 4

Hence, the number of oranges the athlete will eat in the month of July = The number of oranges he eats in one day  $\times$  The number of days in the month of July  
=  $24 \times 31$   
= **744 oranges**

(2) € 291120

### Step 1

Rent for one room is € 3639.

### Step 2

Rent for 80 rooms would be 80 times 3639, that is,  $80 \times 3639$   
= €291120

### Step 3

Hence, the daily income of the hotel from the room rental, if all the rooms are occupied, is **€291120.**

(3) 402612

**Step 1**

There are 7 days in a week. This means, the number of days in 6 weeks = 7 times 6  
 $= 7 \times 6$  days  
 $= 42$  days

**Step 2**

We need to calculate the number of cricket bats manufactured in 6 weeks.

**Step 3**

This means, we need to calculate the number of cricket bats manufactured in 42 days.

**Step 4**

Hence, the number of cricket bats manufactured by the factory in 42 days = The number of cricket bats manufactured by the factory in 1 day  $\times$  The number of days  
 $= 9586 \times 42$   
 $= \mathbf{402612}$  cricket bats

(4) A) 183806

**Step 1**

We have to find the product of 4837 and 38.

**Step 2**

Now, 38 can be written as:  $30 + 8$ .

Since we know that multiplication is distributive over addition, we can say that:

$$4837 \times 38, \text{ or } 4837 \times (30 + 8) = 4837 \times 30 + 4837 \times 8$$

**Step 3**

$$4837 \times 30 = 145110$$

$$4837 \times 8 = 38696$$

**Step 4**

On adding the products, we get:

$$145110 + 38696 = 183806$$

**Step 5**

Therefore, the product of 4837 and 38 is 183806.

B) 359255

**Step 1**

We have to find the product of 5527 and 65.

**Step 2**

Now, 65 can be written as:  $60 + 5$ .

Since we know that multiplication is distributive over addition, we can say that:

$$5527 \times 65, \text{ or } 5527 \times (60 + 5) = 5527 \times 60 + 5527 \times 5$$

**Step 3**

$$5527 \times 60 = 331620$$

$$5527 \times 5 = 27635$$

**Step 4**

On adding the products, we get:

$$331620 + 27635 = 359255$$

**Step 5**

Therefore, the product of 5527 and 65 is 359255.

C) 23760

**Step 1**

We have to find the product of 1980 and 12.

**Step 2**

Now, 12 can be written as:  $10 + 2$ .

Since we know that multiplication is distributive over addition, we can say that:

$$1980 \times 12, \text{ or } 1980 \times (10 + 2) = 1980 \times 10 + 1980 \times 2$$

**Step 3**

$$1980 \times 10 = 19800$$

$$1980 \times 2 = 3960$$

**Step 4**

On adding the products, we get:

$$19800 + 3960 = 23760$$

**Step 5**

Therefore, the product of 1980 and 12 is 23760.

D) 184450

**Step 1**

We have to find the product of 2975 and 62.

**Step 2**

Now, 62 can be written as:  $60 + 2$ .

Since we know that multiplication is distributive over addition, we can say that:

$$2975 \times 62, \text{ or } 2975 \times (60 + 2) = 2975 \times 60 + 2975 \times 2$$

**Step 3**

$$2975 \times 60 = 178500$$

$$2975 \times 2 = 5950$$

**Step 4**

On adding the products, we get:

$$178500 + 5950 = 184450$$

**Step 5**

Therefore, the product of 2975 and 62 is 184450.

E) 256500

**Step 1**

We have to find the product of 4500 and 57.

**Step 2**

Now, 57 can be written as:  $50 + 7$ .

Since we know that multiplication is distributive over addition, we can say that:

$$4500 \times 57, \text{ or } 4500 \times (50 + 7) = 4500 \times 50 + 4500 \times 7$$

**Step 3**

$$4500 \times 50 = 225000$$

$$4500 \times 7 = 31500$$

**Step 4**

On adding the products, we get:

$$225000 + 31500 = 256500$$

**Step 5**

Therefore, the product of 4500 and 57 is 256500.

F) 745682

**Step 1**

We have to find the product of 7609 and 98.

**Step 2**

Now, 98 can be written as:  $90 + 8$ .

Since we know that multiplication is distributive over addition, we can say that:

$$7609 \times 98, \text{ or } 7609 \times (90 + 8) = 7609 \times 90 + 7609 \times 8$$

**Step 3**

$$7609 \times 90 = 684810$$

$$7609 \times 8 = 60872$$

**Step 4**

On adding the products, we get:

$$684810 + 60872 = 745682$$

**Step 5**

Therefore, the product of 7609 and 98 is 745682.

(5) 8760

**Step 1**

Given, the body builder eats 2 dozen eggs in a day.

**Step 2**

We know a dozen eggs means 12 eggs. This means, the body builder eats  $2 \times 12$  eggs = 24 eggs in a day.

**Step 3**

Hence, the number of eggs the body builder will eat in a year = The number of eggs the body builder eats in a day  $\times$  The number of days in a year

$$= 24 \times 365$$

$$= \mathbf{8760 \text{ eggs}}$$

(6) € 189

**Step 1**

The cost of each pen is € 27.

**Step 2**

This means, the money Maxim paid for 7 pens is  $7 \times € 27 = € 189$ .

(7) 49

**Step 1**

According to the question, the total number of sharpeners in the bag = 7

We are also given that there are 7 times as many erasers as sharpeners in the bag.

So, the number of erasers in the bag = 7 times the number of sharpeners

$$= 7 \times \text{number of sharpeners}$$

$$= 7 \times 7$$

$$= 49$$

**Step 2**

Hence, there are **49** erasers in the bag.

(8) 2884

**Step 1**

There are 7 days in a week. This means, the number of days in 4 weeks = 7 times 4

$$= 7 \times 4 \text{ days}$$

$$= 28 \text{ days}$$

**Step 2**

We need to calculate the number of guitars manufactured in 4 weeks.

**Step 3**

This means, we need to calculate the number of guitars manufactured in 28 days.

**Step 4**

Hence, the number of guitars manufactured by the factory in 28 days = The number of guitars manufactured by the factory in 1 day  $\times$  The number of days

$$= 103 \times 28$$

$$= 2884 \text{ guitars}$$

(9) 2184 km.

**Step 1**

The train travels 91 km in one hour.

**Step 2**

This means, the train will travel 24 times 91 km in one day because we have 24 hours in a day.

**Step 3**

Hence, the train will travel  $24 \times 91 \text{ km} = 2184 \text{ km}$  in a day.

(10) A) 1400056

**Step 1**

Let us first evaluate what is inside the brackets:  $100+80+4 = 184$

**Step 2**

Now, the problem becomes  $7609 \times 184$ .

$$7609 \times 184 = 1400056$$

B) 5429583

**Step 1**

Let us first evaluate what is inside the brackets:  $600+30+9 = 639$

**Step 2**

Now, the problem becomes  $8497 \times 639$ .

$$8497 \times 639 = 5429583$$

(11) 110

**Step 1**

Total number of people who ate pizza slices = Number of Roman's friends + 1 (Roman himself)  
 $= 21 + 1$   
 $= 22$

**Step 2**

Total number of slices eaten by each person = 5

**Step 3**

Total number of slices eaten by Roman and his friends = Total number of people  $\times$  Total number of slices eaten by each person  
 $= 22 \times 5$   
 $= 110$

**Step 4**

Hence, Roman had ordered 110 slices.

(12) A) two million five hundred thirty-nine thousand five hundred fifty-one

**Step 1**

Let us first convert the given number into numerals:

two thousand five hundred seventy-three = 2573

nine hundred eighty-seven = 987

**Step 2**

The product will be:

$$\begin{array}{r} 2573 \\ \times 987 \\ \hline 18011 \\ 205840 \\ 2315700 \\ \hline 2539551 \end{array}$$

**Step 3**

Therefore, the product of two thousand five hundred seventy-three by nine hundred eighty-seven is **two million five hundred thirty-nine thousand five hundred fifty-one**.

B) eight million nine hundred twenty-seven thousand eight hundred forty-one

**Step 1**

Let us first convert the given number into numerals:

nine thousand nine hundred fifty-three = 9953

eight hundred ninety-seven = 897

**Step 2**

The product will be:

$$\begin{array}{r} 9953 \\ \times 897 \\ \hline 69671 \\ 895770 \\ 7962400 \\ \hline 8927841 \end{array}$$

**Step 3**

Therefore, the product of nine thousand nine hundred fifty-three by eight hundred ninety-seven is **eight million nine hundred twenty-seven thousand eight hundred forty-one**.



(13) d.  $6 \times 7$

**Step 1**

If we multiply the number of pencils in each row with the total number of rows, we can get the total number of pencils.

**Step 2**

Number of pencils = Number of rows  $\times$  pencils in each row  
 $= 6 \times 7$   
 $= 42$

**Step 3**

Here, the expression used to find the total number of pencils is multiplication, that is,  $6 \times 7$ .

(14) d.  $3 \times 80 + 3 \times 4$

**Step 1**

Here, we have to find the expression for  $3 \times 84$ .

We know,  $84 = 80 + 4$

Replacing 84 by  $80 + 4$  in the given expression:

$3 \times 84 = 3 \times (80 + 4)$   
 $= 3 \times 80 + 3 \times 4$  (by using the distributive property of addition)

**Step 2**

We conclude that  $3 \times 84$  can also be represented as  $3 \times 80 + 3 \times 4$  and  $3 \times 80 + 3 \times 4$ .

**Step 3**

On observing the given options, we conclude that option **d** is the correct answer.

(15) A) 2900

$$\begin{array}{r} 100 \\ \times 29 \\ \hline 900 \\ 2000 \\ \hline 2900 \\ \hline \end{array}$$

B) 114

$$\begin{array}{r} 114 \\ \times 1 \\ \hline 114 \\ \hline 114 \\ \hline \end{array}$$

C) 23040000

$$\begin{array}{r} 30000 \\ \times 768 \\ \hline 240000 \\ 1800000 \\ 21000000 \\ \hline 23040000 \\ \hline \end{array}$$

D) 3472000

$$\begin{array}{r} 7000 \\ \times 496 \\ \hline 42000 \\ 630000 \\ 2800000 \\ \hline 3472000 \\ \hline \end{array}$$

E) 51000

$$\begin{array}{r} 300 \\ \times 170 \\ \hline 000 \\ 21000 \\ 30000 \\ \hline 51000 \\ \hline \end{array}$$

F)

560

$$\begin{array}{r} 28 \\ \times 20 \\ \hline 00 \\ 560 \\ \hline 560 \\ \hline \end{array}$$