

## MATHEMATICAL RIDDLES

### 1. **Flowers and the Bees**

In a village there was a lotus pond. In the pond, a few lotus flowers were in bloom. Few bees came humming. Each bee tried to sit on one flower. One bee was left without a flower. Hence, bees sat in pairs on each flower. This time, a flower was left without any bees. In total, how many flowers were there ? How many bees came ?

### 2. **Palmyrah Fruits**

There lived in a village a person called Munuswami. He owned some palmyrah trees. One day he plucked 30 palmyrah fruits. A total of 60 seeds were there in these fruits. These fruits included one-seeded, two-seeded and three-seeded fruits. At the time of plucking two other persons were with Munuswami. The fruits were to be divided equally among the three persons. While dividing the fruits, the seeds inside the fruits should also get divided equally. The fruits should not be cut and given. How will you divide ?

### 3. **Sharing coconuts**

There lived in a village two brothers (elder and younger). The younger one knew how to climb the coconut tree but the elder one did not know. The two brothers had agreed to share the coconuts from the coconut grove as follows: the elder to get two-thirds and the younger to get one-third. The younger one climbed the tree and plucked the coconuts. The elder one gave the younger one one coconut in addition to his own share. Now, both get equal number of coconuts. How many coconuts were plucked ? What was the share of the elder brother ? What was the share of the younger brother? With an additional coconut given as coolie for climbing the tree how many coconuts the younger brother got?

### 4. **Broken Eggs**

An egg trader was moving along a road selling eggs. An idler who didn't have much work to do started to get the egg trader into a wordy duel. This grew into a fight and he pulled the basket with eggs and dashed it on the floor. The eggs broke. The trader requested the Panchayat (five member committee) meeting to settle the dispute. The Panchayat asked the trader how many eggs were broken ? He gave the following response

- if counted in pairs, one will remain;
- if counted in threes, two will remain;
- if counted in fours, three will remain;

if counted in fives, four will remain;  
if counted in seven, nothing will remain;

### **5. Plucked Lime Fruits**

In a small town, there was a big house and a garden around it. The whole place had seven gateways. There were several lime trees in the garden. One day a person from this small town went to pluck lime fruits in that garden. When he went the watchman at each of the seven gateways told him that he should give him half of the fruits that he brings. As he was returning he gave each guard half of what he had. When he came out he had one lime fruit on hand. What was the total number of lime fruits he plucked?

### **6. A Flock of Sparrows**

A sparrow was sitting on a branch of a tree. At that time a flock of sparrows was flying above the tree. The sparrow that was sitting called out for the flock of sparrows: Oh! One hundred sparrows ! Oh ! One hundred sparrows !! Where are you going ? come and sit on this tree and take rest and then continue your journey. Hearing this, one of the sparrows from the flock said that, "We are not hundred. We, a similar flock like us, one half of that, one half of that and you together will make one hundred. If that is so, how many sparrows were there in the flock that was flying?"

### **7. Feast**

A couple in a house celebrated ear-boring ceremony for their child. They had invited their relatives in their village for lunch. One hundred plantain leaves were laid for the feast. As one of the items for lunch, they had arranged to fry one hundred pappads. They served the pappads differentially among men, women and children. Each man was served three, each woman two and each child one half. A total of 100 persons ate in the feast. The 100 fried pappads have all been served. The persons and the pappads became even. Among those who ate, how many were men, how many were women and how many were children?

### **8. Trading in the Market Place**

Kandan went to the market. Trading was on with all fervour. Kandan had Rs.100/- He wanted to buy one hundred things with 100 rupees he had. He wanted to buy elephant, sugarcane and pumpkin. The cost of the elephant was Rs. 5/-; a bundle of sugarcane with 20

sticks one rupee and pumpkin one rupee each. How many of each of these he should have bought if he were to even out 100 things with 100 rupees. ?

### **9. Coconut offerings**

In a village, there were three Ganesha temples. A devotee went to worship taking along a few coconuts with him. when he reached the first temple and looked at the coconuts, they had doubled in number. He took a few and offered them to the Lord by dashing them on the floor. From there he went to the second temple. Here again the coconuts he brought had doubled. In this temple he offered the same number of coconuts he offered in the first temple. With the remaining coconuts he went to the third temple. Here again the coconuts doubled in their number. The number after doubling was the same as the number of coconuts he offered in temple one and again in temple two. He offered all the coconuts in hand and worshipped. How many coconuts did he bring in the beginning ? How many coconuts he offered in each temple ?

### **10. Worship in the temple with Flowers**

In a village there were three temples. A devotee brought some flowers in a basket. When he reached the first temple, he immersed the basket with flowers in the temple tank and lifted it. The flowers in the basket doubled in their number. He took out some flowers from the basket and worshipped the God. He came to the second temple. Here again he put the basket with flowers in the tank and took it out. The flowers doubled in number. He took out the same number of flowers he offered in the first temple and worshipped the Lord. He then started off and went to the third temple. The remaining flowers in the basket were taken to the temple tank, immersed in the tank and taken out. The number of flowers got doubled. He offered all the flowers in the basket and worshipped. The number of flowers offered was the same as the number offered in the first and second temple. How many flowers did he bring in the beginning? How many flowers did he offer in each temple ?

### **11. Oil Merchant**

In a village, there lived an oil merchant, who used to crush oil seeds, extract oil and sell it. After several days of hard work, he got ready to take the extracted oil to the market. On his way to the market he came across a vinayaka temple. He entered the temple and prayed "Today if my business goes well, on my way back, I will light the lamps in the temple using one measure of oil.

He moved on. As he crossed some more distance, he saw a temple of Goddess. He went in and again prayed the same way he prayed to Vinayaka. He continued his journey and reached the Ayyanar temple at the village limits. He again prayed the same way.

He went to the market. He had good business that day. In the evening as he was returning, he took sufficient quantity of oil in a pot to fulfil his vow in the three temples. He reached the Ayyanar Temple. He saw a small tank of water near the temple. He kept the pot on the tank-bund and he got into the tank in order to wash his feet, hands and face. At that time a crow came and sat on the pot and tilted it. The oil flowed out on the ground. The merchant came running and straightened the pot. A small quantity of oil remained in the pot. A good quantity of oil was spilt on the ground.

With the quantity of oil left in the pot, the merchant went to the Ayyanar temple. He expressed his feelings of not being able to fulfil his promise. Ayyanar sympathised with him and blessed him saying " May the quantity of oil in the pot be doubled. " and so it happened. The oil trader fulfilled his vow of lighting lamps in the temple using one measure of oil.

He covered some distance. He reached the temple of Goddess with the pot containing little quantity of oil. Here again he narrated the happenings and expressed that he feels sorry that he is unable to do what he vowed. Goddess blessed him and graced by doubling the quantity of oil in the pot. The merchant took out one measure of oil and lighted the lamps and fulfilled his vow. Little quantity of oil was left in the pot.

The merchant walked further and reached the Vinayaka temple. With all devotion he narrated all that happened and expressed with sadness his inability to fulfil his vow. Vinayaka also blessed him with double the quantity of oil. The merchant took out one measure and lighted the lamps. The pot was empty now.

What was the quantity of oil in the pot when the merchant straightened the pot after driving the crow away?

## **12. Milk Vending**

A milk vendor had several customers to whom he was selling milk everyday. He generally brought milk in big metal pots and measured with traditional standard volume measure and supplied any quantity between one measure to eight measures. One day he forgot to bring in his standard volume measure. The customers also didn't have any clean volume measure for him to use. The capacity of the two metal pots he had were in terms of three measures and five measures. He used these two metal pots and measured milk from one to eight measures. How did he do it ?

**13. Coins Given as Coolie**

One boy was working in a provision store. His daily wage was one rupee and fifty paise. In order for him to understand the coins and the pattern of change in transactions, the shop keeper was paying his wage in coins of 10 paise and above. How many ways he could give the coins?

**14. Broken Weight Measure**

40 Palams (one Viss) weight measure dropped down. It broke into four pieces. With these four pieces it was possible to weigh things from one palam to 40 palams. How much was the weight of each of the broken pieces ?

**15. Changing the linear dimensions of a plank**

A plank was of 6 feet length and 3 feet width. It has to be made into a plank of 9 feet length and 2 feet width. It is to be cut along a single continuous line only. There should be only one joint. How to cut and join ?

**16. Eight Eights**

There are eight eights. You can add them, subtract them, multiply them arranging them any way you like. The product you should get one thousand. Explain how you did it.

**17. The Number in Your Mind**

Think of a number within 10. You are taking a loan equivalent to the number in your mind. You add this loan to the number you had in mind. Give half of the added figure to the Lord. What is the remainder? I can tell you the number you had in your mind.

**18. Which is the left out number?**

Take any number with seven or eight digits (e.g. 5679432). Add the number in each digit to the number in the next digit and find the sum total of all the numbers (e.g.36). Speak

out this number. Subtract this total from the original number taken e.g.  $5679432 - 36 = 5679396$ . Leave out the number of any one digit. The number you leave out should not be 1 or 9. If you speak out the remaining number, I can tell you the number left out.

**19. Magic Square**

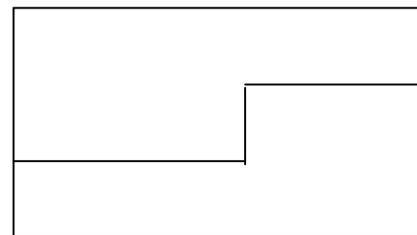
In a big square, there are nine small squares arranged in rows and columns of three squares each. Using numbers 1 to 9, fill in the squares in such a way that adding up from any row or column should bring a total of 15.

**20. Goat, Tiger and a Bundle of Grass**

A river was flowing on one side of a village. Once there were floods in the river. A villager had a goat, tiger and a bundle of grass which he wanted to take across the river. The facility available was only a small boat. At a time only two could travel. It is necessary to see that the bundle of grass should be saved from the goat and the goat from the tiger. How would the villager have taken all the three across the river?

## SOLUTIONS FOR THE RIDDLES

1. 3 Flower and 4 bees
2. Each one will get 10 fruits. One will get 10 two-seeded fruits; the other two will get five one-seeded and five three seeded fruits each.
3. Total coconuts plucked was 6,  
To the elder brother  $4 - 1 = 3$   
To the younger brother  $2 + 1 = 3$
4. 199 eggs
5. 128 lime fruits
6. 36 Sparrows
7. 72 children, 20 Women, 8 men
8. Sugar cane 80, pumpkin 1, Elephant 19
9. First temple  $7+7 = 14 - 8 = 6$   
Second temple  $6 + 6 = 12 - 8 = 4$   
Third temple  $4 + 4 = 8 - 8 = 0$
10. First temple  $7 + 7 = 14 - 8 = 6$   
Second temple  $6 + 6 = 12 - 8 = 4$   
Third temple  $4 + 4 = 8 - 8 = 0$
11. Seven eighth measure ( $7/8$ )
12. 1 measure =  $(2 \times 3) - 5 = 1$   
2 measures =  $5 - 3 = 2$   
3 measures =  $3 = 3$   
4 measures =  $2 ( 5-3) = 4$   
5 measures =  $5 = 5$   
6 measures =  $2 \times 3 = 6$   
7 measures =  $5 + (5-3) = 7$   
8 measures =  $5+3 = 8$
13. 33 ways
14. 1,3,9,27 palams
15. The plank can be cut along the line in the centre as shown in the figure and the lower piece is to be joined with the upper piece so as to make it a rectangle. It can be tried out with pieces of paper.
16.  $888 + 88 + 8 + 8 + 8 = 1000$
17. The number in your mind is the number that comes out as a remainder.
18. In order to find the number left out subtract the total of the spoken out remaining number from the total of the number taken in the beginning
- 19.



|   |    |    |    |    |
|---|----|----|----|----|
|   | 15 | 15 | 15 |    |
| 4 | 9  | 2  |    | 15 |
| 3 | 5  | 7  |    | 15 |
| 8 | 1  | 6  |    | 15 |

20.

| This side                     | Boat                       | That side                                    |
|-------------------------------|----------------------------|--|
| a) Tiger &<br>Bundle of grass | Man and Goat               | Goat   |
| b) Tiger                      | Man and Bundle<br>of grass | Bundle of grass                              |
| c) Goat                       | Man and Goat               | Goat   |
| d) Goat and Tiger             | Man and Tiger              | Tiger  |
| e) Goat                       | Man and Goat               | Man, Tiger, Goat<br>and a Bundle of<br>grass |