

Maths Olympiad Level 4

| Sections | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | TOTAL |
|----------------|----|----|----|----|----|----|----|----|----|-----|-------|
| Marks obtained | | | | | | | | | | | |

General Instructions:

1. Duration of the exam is one hour.
2. The exam should be answered using pencil on the question paper itself.
3. Please read the questions carefully before answering them.
4. Fill in your details on this page before the exam begins.

Student Details:

Name _____

Std _____

Level Appearing for _____

Honour Code:

I pledge that I will not copy or take help from my friends/teachers while answering questions during this exam.

Signature/Name _____

Q1. Find the missing digits. (4)

Subtraction

| | | | | | | |
|---|---|---|---|---|---|---|
| | 1 | | 6 | 4 | 8 | |
| - | | 6 | 2 | | | 2 |
| | 1 | 3 | | 7 | 2 | 1 |

Addition

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 4 | 4 | 8 | 4 | | 8 | 2 |
| + | 3 | | 2 | | 7 | 4 | |
| | | 9 | | 8 | 4 | | 7 |

Q2. Answer the following questions. (8)

1. What is the difference between the biggest 4-digit number and smallest 4-digit number?
2. What is the product of the smallest 3-digit number and the biggest 2-digit number?
3. I am factor of 84 and my common multiples are 3 and 7. The sum of my digit is 3. What number am I?
4. Change 2.89 to a fractional number.
5. Convert 3 months into weeks.
6. What is the Roman numeral for the Hindu Arabic numeral 13?

Q3. Find the HCF and LCM of the following.

(6)

1. Find the HCF of 35, 45 using factor method.

2. Find the LCM of 16, 24 using division method.

3. Find the LCM of 12, 16 using factor tree method.

Q4. Solve the fractions given below.

(4)

$$\frac{6}{12} + \frac{4}{8} = \underline{\hspace{2cm}}$$

$$\frac{5}{7} - \frac{1}{4} = \underline{\hspace{2cm}}$$

$$\frac{3}{8} \times \frac{6}{7} = \underline{\hspace{2cm}}$$

$$\frac{5}{8} \div \frac{4}{6} = \underline{\hspace{2cm}}$$

Q5. Tick the box if the number is divisible by the header. (6)

| Factors/ Numbers | 4 | 5 | 6 | 9 |
|------------------|---|---|---|---|
| 7488 | | | | |
| 9344 | | | | |
| 2043 | | | | |

Q6. Solve the problems based on Profit and Loss. (7)

1. Shyam bought a land for Rs. 3,50,000 and sold it at a profit of Rs. 85,000. At what price did Shyam sell his land?
2. A fruit seller bought apples for Rs.250 per kg and sold it for Rs. 225 per kg. Did the fruit seller make a profit or loss, and how much?
3. Monica bought a designer purse for Rs. 1,285 and after using it for 1 year she sold it for a loss of Rs. 350. At what price did she sell her purse?
4. Vinit bought a computer from America for Rs. 48,500 and sold it for Rs. 62,000 in India. Did he make a profit or loss, and how much ?

Q7. Find area and perimeter.

(4)

1. A square whose side is 3.5 cm.

2. A rectangle having length of 5.5 cm and breadth of 8.5cm.

Q8. Draw and name the types of angles given below.

(3)

1. 120°

2. 240°

Q9. Use the appropriate sign "<" or ">"

(4)

1. 2.10 _____ 2.15

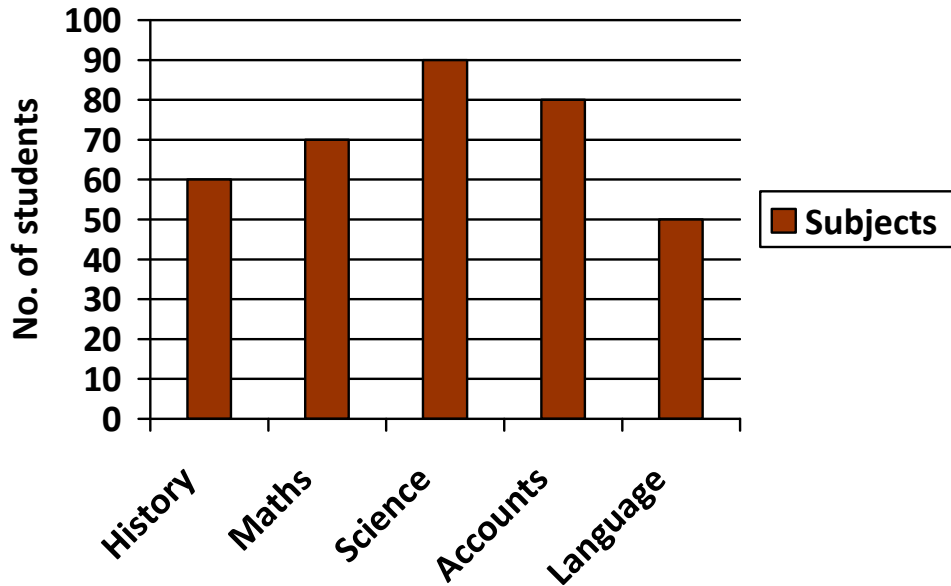
2. 1.02 _____ 0.40

3. $\frac{3}{7}$ _____ $\frac{1}{2}$

4. $\frac{2}{5}$ _____ $\frac{1}{6}$

Q10. Look at the graph and answer the questions given below. (4)

The chart below shows the number of students in a college opting for different subjects.



1. How many students in the college in all have opted for Accounts and Language?
2. How many students are there in all. Assuming each student opts for only one subject?
3. How many students in the college in all have opted for History, Maths and Science?
4. Which subject has the highest number of students and how much is it?