



Maths Olympiad

Downloadable Mock

Level 7

General Instructions:

1. Please note this is a mock paper. The questions may differ in the final exam. This is only for your practice.
2. The exam should be answered on the question paper itself.
3. Please read the questions carefully before answering them.

Student Details:

Name: _____

Level: _____

LMS ID: _____

School Name: _____

Q1. Answer the following.

1. Sum of -470 and -170

2. Find x if $614 \div (307 \div x) = (614 \div 307) \div x$

3. What should be multiplied to $(-2)^{-7}$ to get $(2)^{-6}$?

Q2. Find the following.

1. A trader loses 14% on selling a machine for Rs. 6880. What price should he sell the machine so as to gain 10% on it?

2. A non-stick frying pan is sold at a gain of 6%. Had it been sold at Rs. 10 more, the gain would have been 8%. Find the cost price of the frying pan.

Q3. Construct as asked.

a) Equilateral triangle PQR of side 7 cm and then construct one of its altitude.

b) Right angle triangle ABC such that angle B is 90° , hypotenuse AC = 8 cm, and angle C is 30° .

c) Make two different nets of a cube of edge 1 cm.

Q4. Solve the below given word problems.

1. The ratio of boys and girls in a school is 7:3. If there are 330 girls, find the number of boys and the total strength of the school.

2. What is the monthly earnings of a person if he spends 80% of his salary, donates 7% of the remaining and is left with just Rs. 6510?

3. Find the value of x in the following. $5 : x :: 85 : 119$

Q5. Answer the following questions based on triangles.

1. If in $\triangle ABC$, $\angle A = 2x + 15^\circ$, $\angle B = x - 20^\circ$ and $\angle C = 3x - 55^\circ$, find the value of x .

Q6. Solve the following.

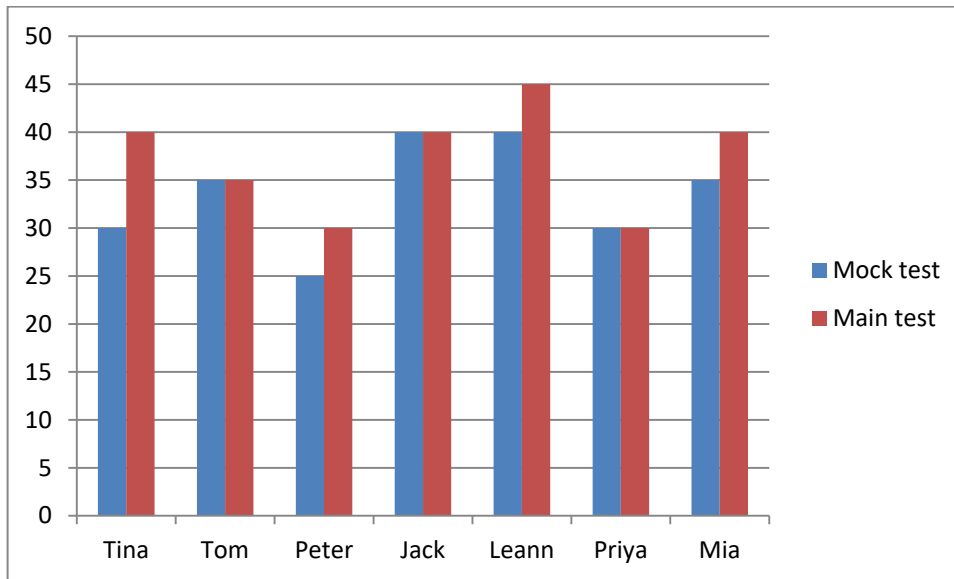
1. The area of a rhombus is 450 cm^2 . If the length of one of the diagonal is 25 cm, then find the length of the other diagonal.
2. Find the area of a circle whose circumference is 369.60 cm.

Q7. Find the mean, median and mode of the given frequency distribution table.

Variable (x)	10	15	20	25	30	35	40
Frequency (f)	4	2	3	1	4	6	5

Q8. A coin is tossed 15 times and head is obtained 3 times. Find the probability of getting (i) a head (ii) a tail, when we toss a coin.

Q9. Observe the graph shown below and answer the following questions.



1. What information does the graph represent?
2. The scores in the main test were the same or better than the mock test.
This statement is –
 - a. True
 - b. False
 - c. Can't say
3. Who scored better marks in the main test as compared to the mock test?
4. Who scored the lowest marks in which test?