

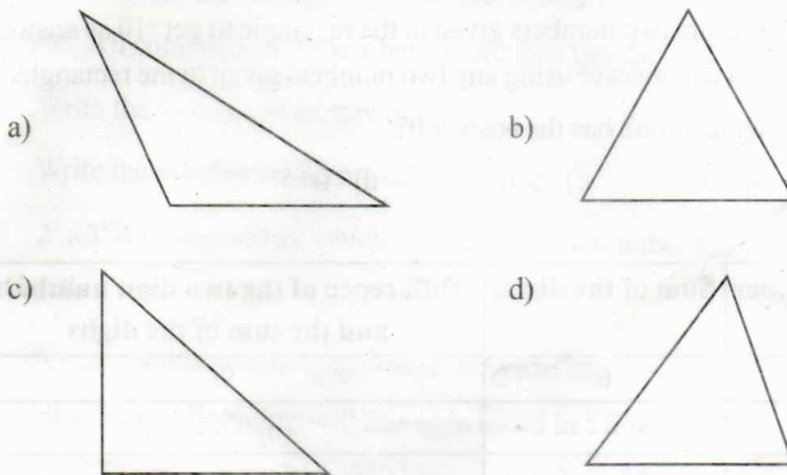
Standard: 7

Time: 2 Hrs

- ◆ 15 minutes is given as cool-off time.
- ◆ Read the questions carefully during this time.
- ◆ Attempt any **six** activities from activities given.

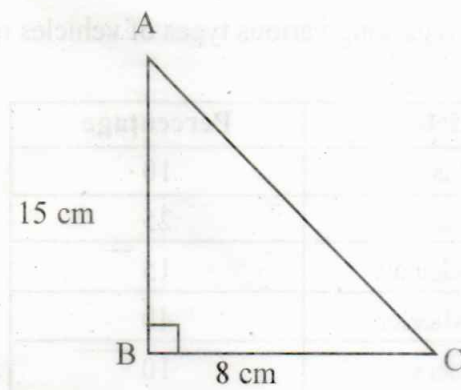
Activity 1

A) Which among the following is a right angled triangle?



B) Which measures given below can be the sides of a right angled triangle?

- a) 5, 7, 9 b) 6, 8, 10 c) 7, 9, 11 d) 8, 10, 12
- C) If the measure of one of the two smaller angles of a right angled triangle is 40° , then what is the measure of the other angle?
- D) Triangle ABC is a right angled triangle. What is the length of AC?



Activity 2

One gram gold costs 5800 rupees.

- A) What is the cost of a gold coin that weighs 4 grams?
- B) If 2% price discount is given for this gold coin, how much amount will be reduced in price?
- C) 10% manufacturing charge was paid for a bangle of 4 grams. How much should be paid for the bangle including the manufacturing charge?

Activity 3

-12,	5,	8,	7
9,	-3,	6,	2

Look at the numbers in the rectangle.

- A) Which is the largest number?
- B) Which is the smallest number?
- C) Write an operation using any two numbers given in the rectangle to get -10 as answer.
- D) Write an operation to get 6 as answer using any two numbers given in the rectangle.
- C) Which of the following operation has the answer 0?
a) $-5-5$, b) $-5+5$ c) $5-0$ d) $0+5$

Activity 4

Two digit number	Sum of the digits	Difference of the two digit numbers and the sum of the digits
15	6	9
29	(a) -----	(b) -----
73	(c) -----	(d) -----

- A) Complete the table.
- B) What is special about the answer obtained when sum of the digits is subtracted from the given two digit number?
- C) What will you get if you subtract the sum of the two digits from the two digit number denoted as $10x+y$.

Activity 5

The table below gives information regarding various types of vehicles registered in the RTO office last year.

Sl.No.	Vehicles	Percentage
1	Bus	10
2	Car	25
3	Autorickshaw	15
4	Two wheeler	40
5	Others	10

Draw a pie chart representing the above information.

Activity 6

- A) Which of the following cannot be the measures of a triangle?
- a) 5 cm, 5 cm, 7 cm b) 7 cm, 7 cm, 5 cm
c) 4 cm, 4 cm, 7 cm d) 3 cm, 3 cm, 7 cm
- B) In triangle XYZ, $XY = 7$ cm, $YZ = 6$ cm, $\angle XYZ = 65^\circ$. Construct the triangle.

Activity 7

- A) Which of the following statements is false?
- a) A prime number has two factors.
b) The product of two different prime numbers has three factors.
c) The number of factors of a perfect square is an odd number.
d) All composite numbers have more than two factors.
- B) Write the number of factors of 2^5 ?
- C) Write the number of factors of $2^5 \times 3^4$?
- D) $2^5 \times 3^4$ is multiplied by which smallest natural number to get a perfect square.

Activity 8

A train travels at an average speed of 54 km/hr.

- A) How many kilometres will this train travel in 5 hours?
- a) 170 km b) 540 km c) 270 km d) 570 km
- B) What is the distance covered in one second?
- C) This train is 180 metres long. How much time does the train take to pass an electric post?