

Standard: VI

Mathematics

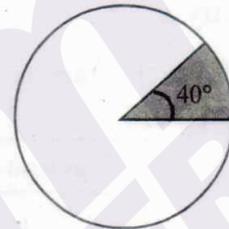
Time: 2 Hrs

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

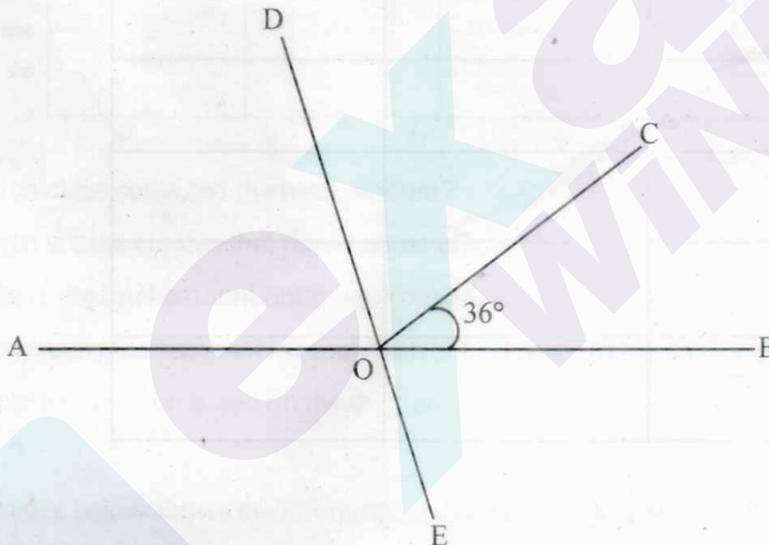
Activity 1

Angle of the shaded portion in the figure is 40° .

- What is the angle of the unshaded portion?
- What part of the circle is shaded?
- What part of the circle is unshaded?



Activity 2



In the figure $\angle DOC$ is twice of $\angle BOC$.

- What is the measure of $\angle DOC$?
- What is the measure of $\angle AOE$?
- Find the measure of $\angle AOD$.
- Name any two linear pairs in the figure.

Activity 3

The total number of students in Manchadikunnu UP school in 2021-22 was 900. 60% of them were girls and the rest were boys.

- A) What percentage of the total are boys?
- B) What is the number of girls?
- C) The number of students increased by 20% in 2022-23 than in the previous year. What is the total number of students in 2022-23?
- D) On 2023-24 the number of children decreased by 10% than the previous year. What is the percentage of the present number of children compared to the previous year?

Activity 4

Write the fraction in the table as fractions with denominators 10, 100, 1000 and write its decimal form.

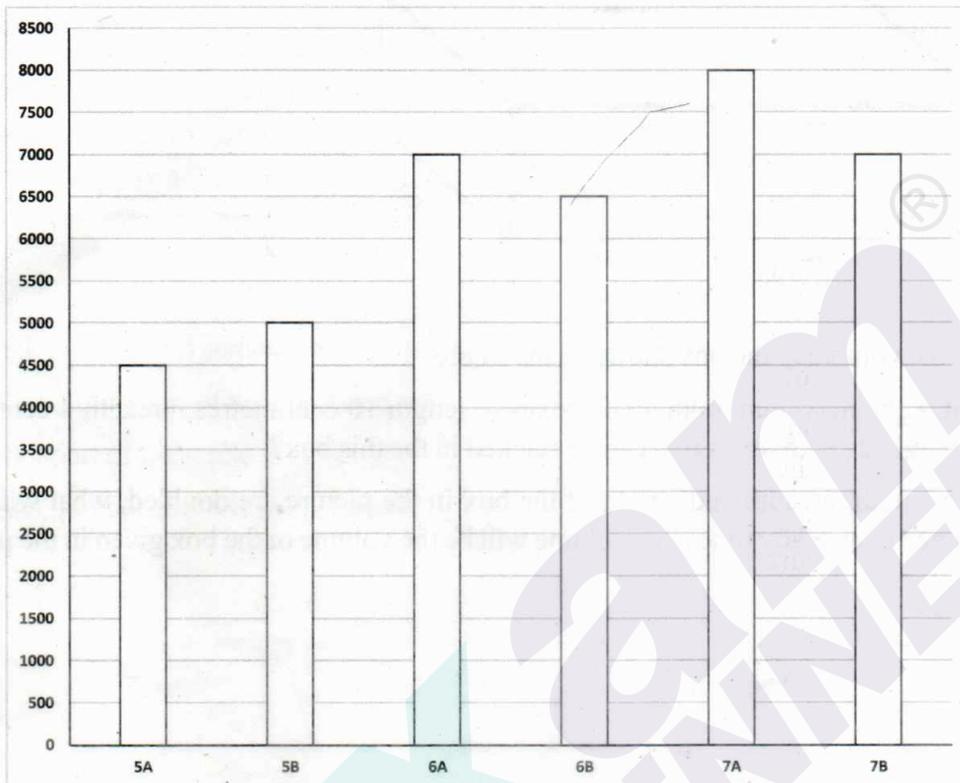
Fraction form	Equal fraction	Decimal Fraction
$\frac{1}{2}$	$\frac{5}{10}$	0.5
$\frac{1}{4}$		
$\frac{3}{8}$		
$\frac{7}{25}$		
$\frac{1}{20}$		
$\frac{3}{5}$		

Activity 5

- A) Which of the following numbers has odd numbers of factors?
[18, 8, 16, 13]
- B) What is the number of factors of 12?
- C) Write 20 as the product of prime numbers?
- D) Write 60 as product of prime factors and write all its factors.

Activity 6

It was decided to construct a house for a classmate in Seena's school. Given below is the bar diagram showing the amount received from the UP section for this purpose.



- A) Which class collected the least amount?
- B) Which are the classes that raised equal amount?
- C) What is the total amount obtained from 5A and 5B classes?
- D) How much more amount is received from 7B than 6B?
- E) Prepare a question based on the diagram.

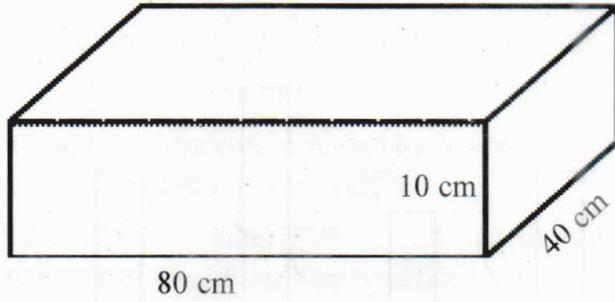
Activity 7

The table below shows the information about the amount brought by some students to invest in School Savings Account.

Name	20 Rupees (Numbers)	10 Rupees (Numbers)	Total Amount
Neenu	2	5	$(2 \times 20) + (5 \times 10) = 90$
Meenu	3	2	$(3 \times 20) + (2 \times 10) = 80$
Ramla	4	4
Meera	1	8

- A) Complete the table.
- B) If the number of 20 rupee notes are denoted by 'a', the number of 10 rupee notes by 'b' and the total amount is denoted by 't' then how can you write the relation among them?

Activity 8



- A) Find the volume of the box shown in the figure.
- B) What is the maximum number of boxes of length 10 centimetres, breadth 4 centimetres and height 2 centimetres that can be stacked in this box?
- C) If the length, breadth and height of the box in the picture are doubled, what will be the volume? How many times this volume will be the volume of the box given in the picture?

Name	20 papers (Number)	10 papers (Number)	Total Amount
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