FIRST TERM EVALUATION 2016-17
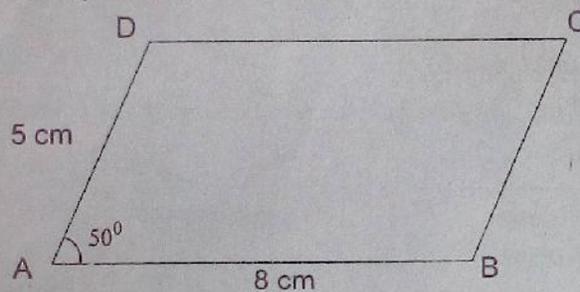
Standard VII

MATHEMATICS

Time: 2 Hrs

Instructions

- 15 minutes is given as cool - off time. This time is to be spent for reading the activities.
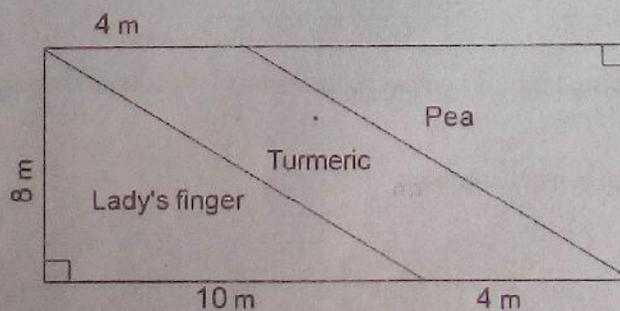- Answer all the questions.

Activity 1

Look at this parallelogram ABCD.

- Find the lengths of BC and CD.

- Find the measure of ∠ABC.
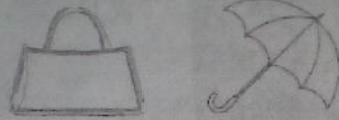
- Construct a parallelogram with the given measures.

Activity 2

The vegetable plot is in a rectangular shape.

1) Find the area of land where lady's finger is cultivated.

2) What is the total area of the land?

3) Find the area of land used for cultivating turmeric.

Activity 3

The price of a bag and an umbrella is Rs 500. The cost of the bag is Rs 150 more than that of the umbrella. Find the cost of each one. Explain the answer in the algebraic form.

Activity 4

1. Write 400 as product of powers of prime numbers.

2. If $5^x = 625$, find 5^{x-1}.

3. If $15^3 = 3375$, what is $(1.5)^3$?

4. Simplify $\dfrac{9^7 \times 9^8}{9^3 \times 9^{10}}$

Activity 5

A magic square is given below.
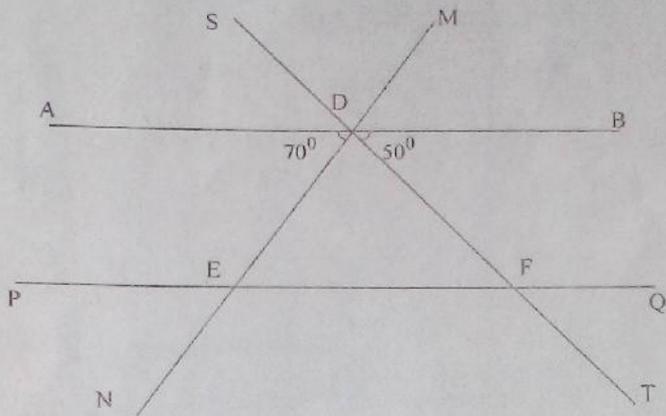
a) Write the numbers in the square in algebraic form.

8	1	6
3	5	7
4	9	2

	X	

b) Find the relation between the number in the centre of the square and the sum of the numbers in each row.

c) Write this relation in algebraic form.

Activity 6

In this figure, AB is parallel to PQ.

a) Examine the figure and complete the table given below.

	Pair of angle	Name of the angle in the pair
1.	∠ADN, ∠PEM	
2.		Corresponding angles
3.	∠BDN, ∠PEM	
4.		Co exterior angles

b) Find the three angles of △EDF. Justify the method used to find the answer.