

Topic of lesson:

# QUADRILATERALS



# The goals lessons:

- ❖ *Educational goals:* Study quadrilateral concepts of its elements:
- ❖ *Developing goals:* activation of cognitive activity of students through the solution of practical problems, the ability to choose the right decision, succinctly express their thoughts, analuze, and draw conclusions.
- ❖ *Communication goals:* mutual aid, reviewing the responses, the organization of mutual contral.

# Material needed:

- The textbook “Geometry” Grade 8.
- Presentain
- Blackboard





Type of lesson:

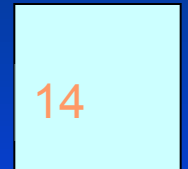
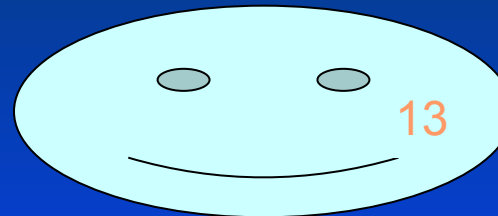
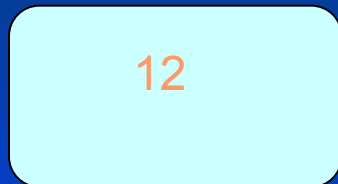
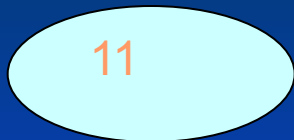
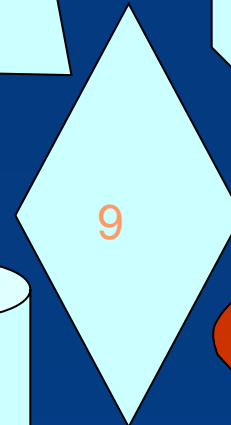
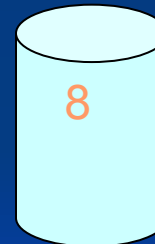
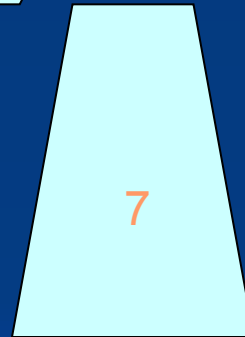
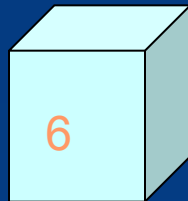
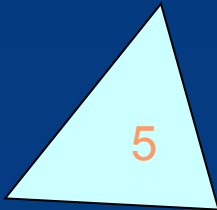
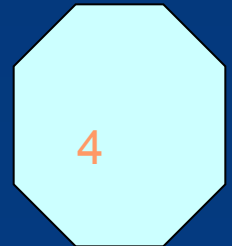
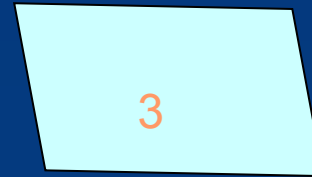
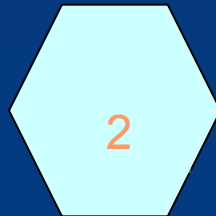
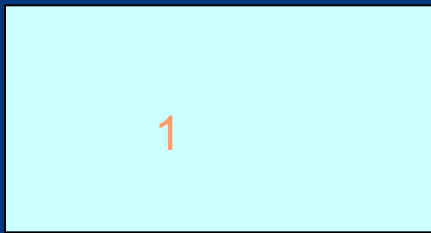
Summarizing the lesson



# Plan of lesson:

1. Topics include. (1-2min)
2. Checking homework. (4-5min)
3. Theoretical number material. (13-14min)
4. solving the problem. (20-23min)
5. HOMEWORK. (2-3min)

# Quadrilateral



# What is a tetragon (Quadrilateral)?

- The Tetragon (Quadrilaterals) is a flat figure, which consists of four lengths (segments), consecutively connecting four points. No two of these points are collinear, but the segments connecting them are not crossed (intersect).

# That is a parallelogram?

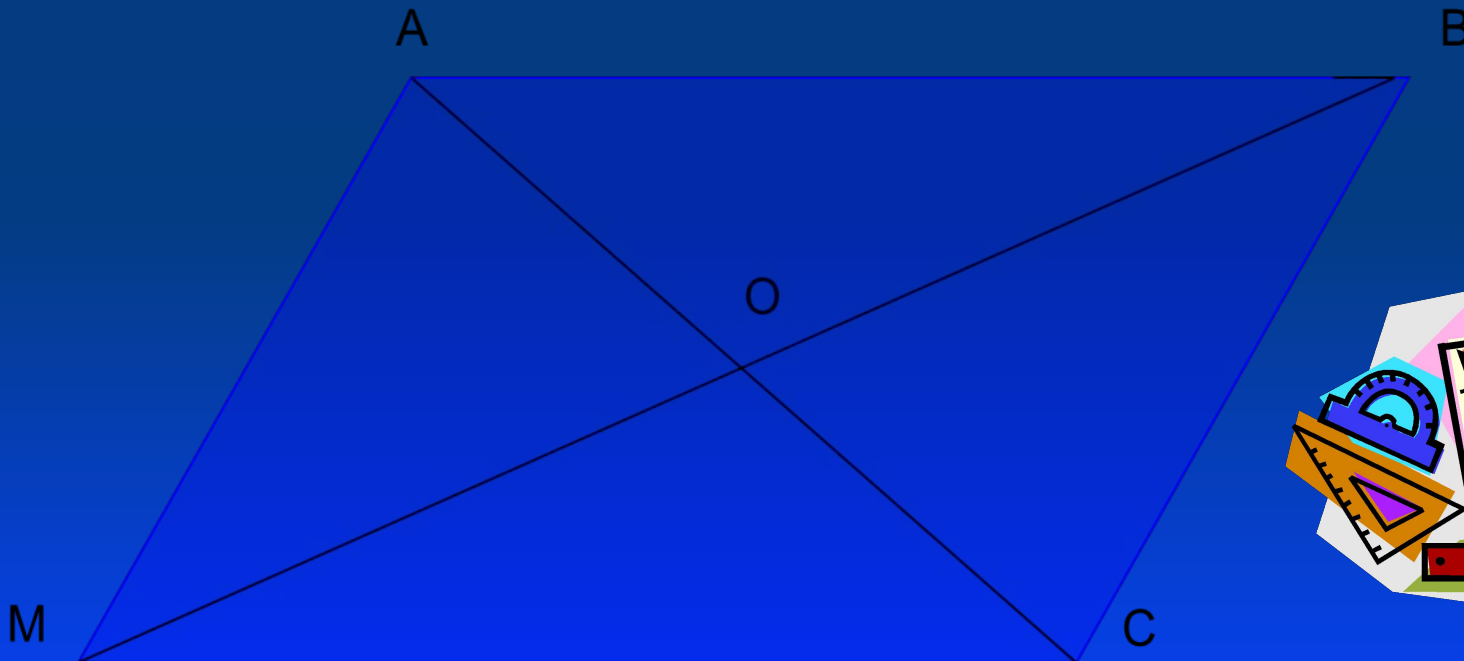
- The Parallelogram is a quadrilateral, the opposite sides being parallel two and two (two by two parallel).

Name the characteristic of the sides and the angles of a parallelogram:

- The opposite sides and angles of a parallelogram are equal.

Name the characteristic of the diagonals of a parallelogram.

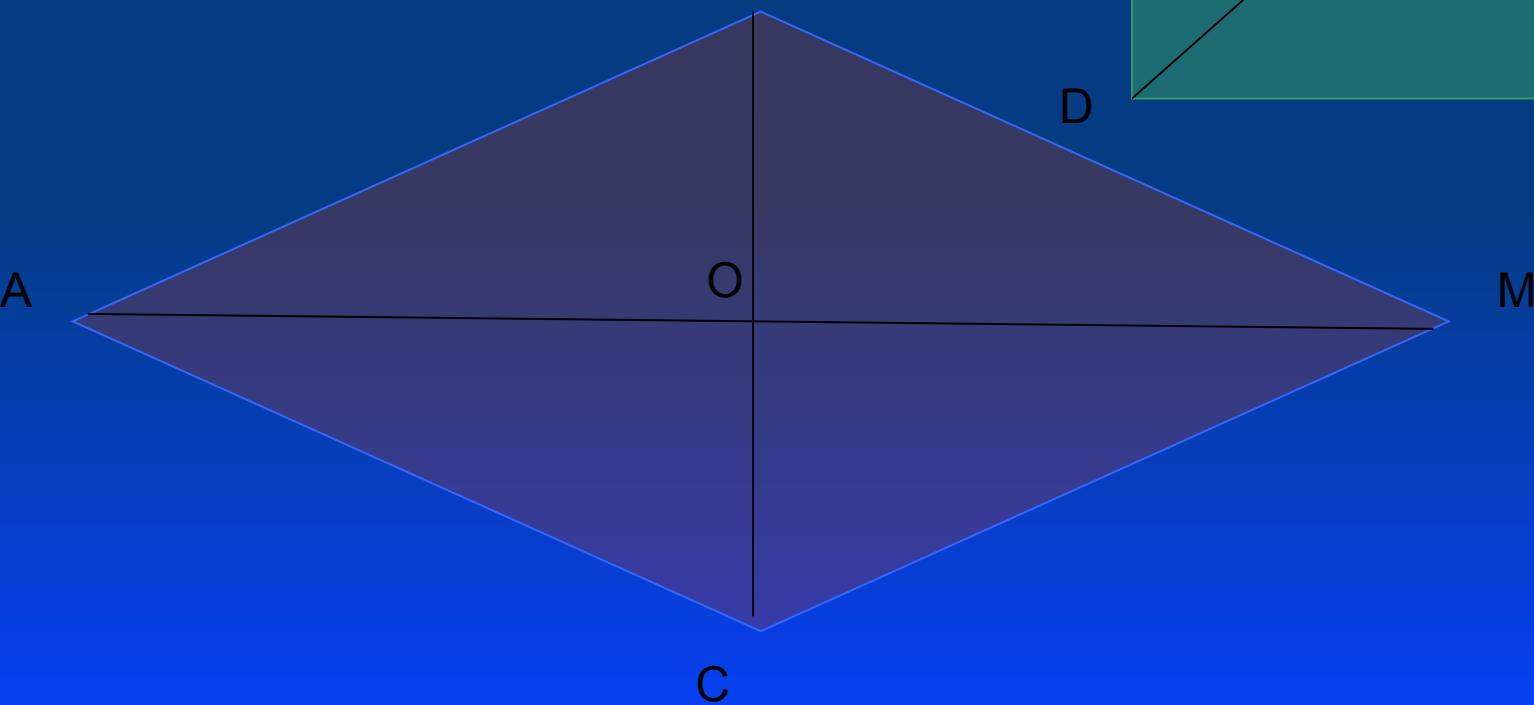
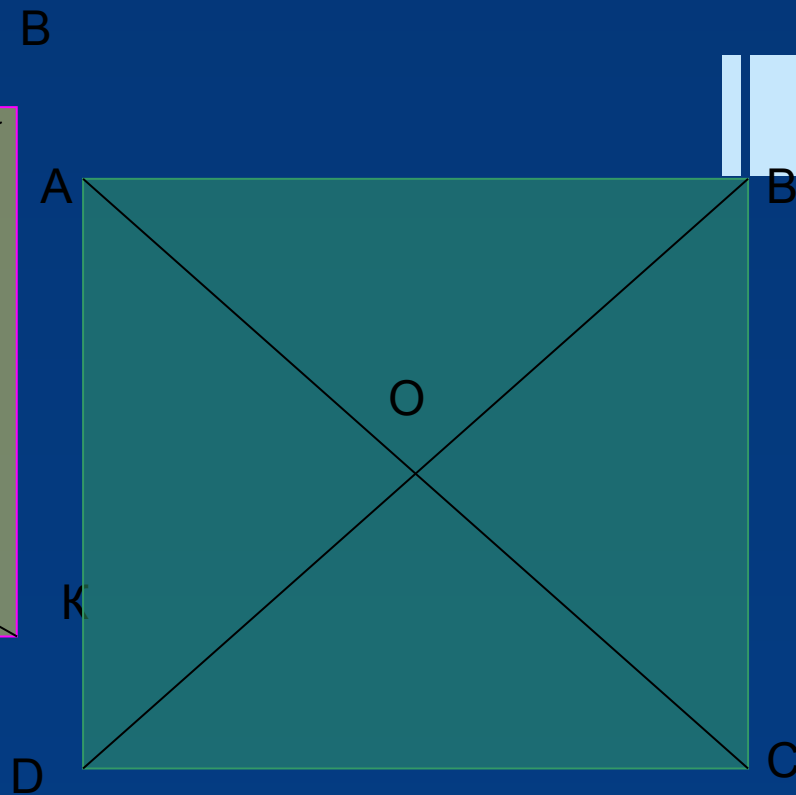
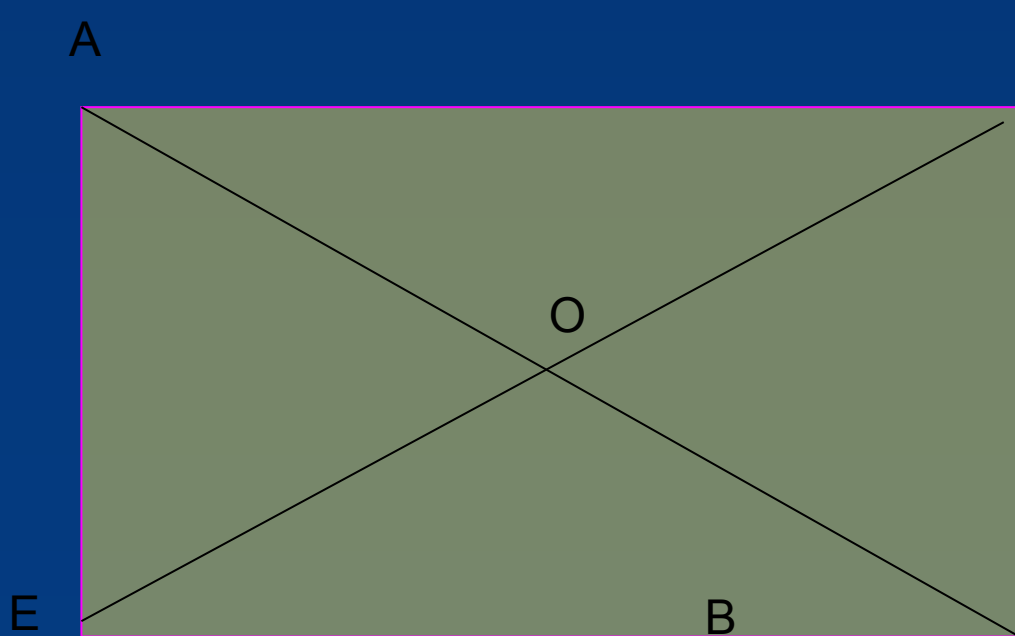
- The diagonals of a parallelogram are crossed (intersect) and divided fifty-fifty cross point (into two equal parts by the point of their intersection).





# types of parallelograms

- The Rectangle - a parallelogram, beside which all corners direct. Diagonals rectangle are.
- The Rhombus - a parallelogram, beside which all sides are. Diagonals of a rhombus are crossed under right angle and are a bisections of its angles.
- The Square - a rectangle, beside which all sides are. Diagonals square are, are crossed under direct angle and are a bisections of its angles.



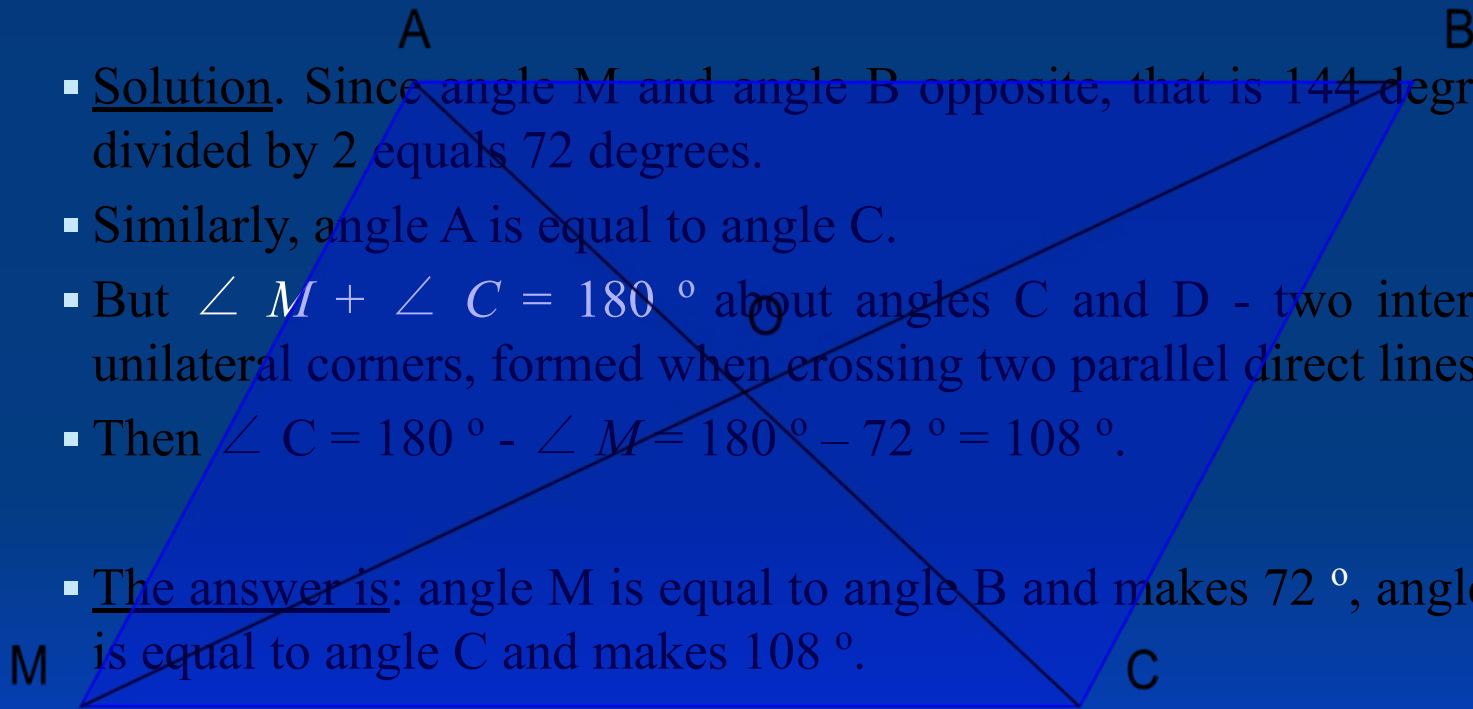
# Solving problems.

- 1. Data: ABCM - a parallelogram  $\angle M + \angle B = 144^\circ$

Find the angles of the parallelogram.

- Solution. Since angle M and angle B opposite, that is 144 degrees divided by 2 equals 72 degrees.
- Similarly, angle A is equal to angle C.
- But  $\angle M + \angle C = 180^\circ$  about angles C and D - two internal unilateral corners, formed when crossing two parallel direct lines.
- Then  $\angle C = 180^\circ - \angle M = 180^\circ - 72^\circ = 108^\circ$ .

- The answer is: angle M is equal to angle B and makes  $72^\circ$ , angle A is equal to angle C and makes  $108^\circ$ .





## HOMEWORK

Page: 92-93  
Exercise №5,7,14



