Let us make snowflakes

(A scenario for Mascil-multipliers - Part I)

1. Draw by hand two snowflakes.

2. Think of various means and ways of representing the snowflakes.

3. “The more it changes, the samer it gets” is a possible translation of a famous French proverb. Try to find what the same is while looking at different images of snowflakes.

4. Find in the internet some results of research on snowflakes. Write down properties relevant to the geometric representation of the snowflakes.

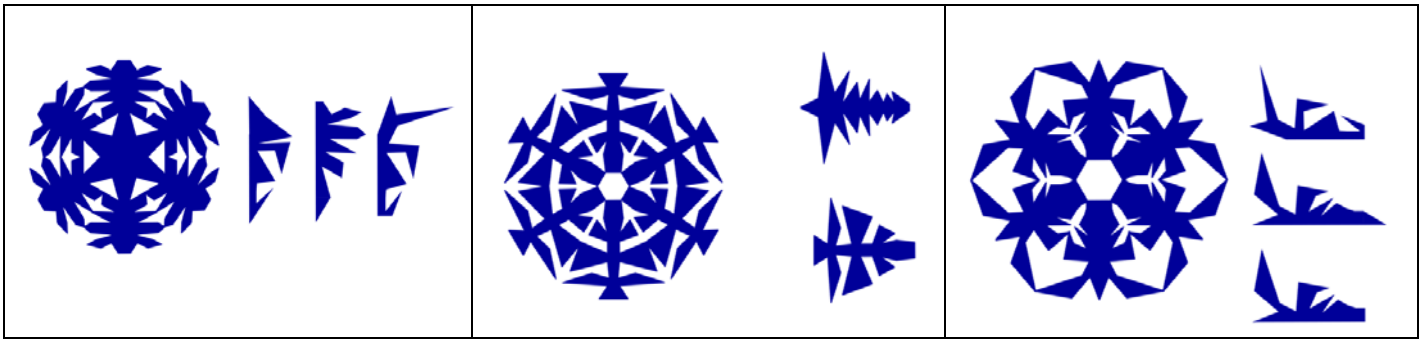
5. Create models of a snowflake.
Hint:

- By cutting paper (figure out how to fold it)
- By sticks (think how to connect them)
- By modules (rectangles, triangles, a module of your own)
- By appropriate software, e.g.

  http://www.math.bas.bg/omi/cabinet/index.php?appletid=22
  http://www.math.bas.bg/omi/cabinet/content/bg/html/d22051.html
- By a sketch, etude, dance or other art froms (individually or in a team)

6. Make a New Year cad, poster or a decoration containing snowflakes.

7. Which of the cutting on the right would produce the snowflake on the left side of the figures a), b), c).



8. Try to find around you models of intented snowflakes which are wrong. Explain what is wrong about them.

9. Create your own problem dealing with snowflakes.

10. Try to find explanations of the following questions: Why do the snowflakes have 6-fold symmetry? Which factors influence the development of the snowflake? Is there red snow, why? How to take a picture of a snowflake?

11. And if you are already impatient to touch real snow, you could follow the example of the great English painter on snow Simon Beck?
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