

Dear Geometry students  
Short information related with strike.

- 1) Tomorrow lecture and tutorial will be cancelled due to the strike.
- 2) On Thursday 1 March it will be lecture and tutorial as usual.

We missed because of the strike two lectures. I put on the web the material of “virtual lectures” and Homework3 (which will be also “virtual” for half of students”) and the material of future lecture (see below).

Realising very well that this is not good, I tried to minimise the content of the material which will not be delivered to students during the lectures.

If you remember on Wednesday 21 February I continued to consider an orientation in vector spaces (pages 19–23 of lecture notes), and just at the end of lecture we considered orientation of linear operator (page 24).

Whether I would read the lectures in a regular way, my plans were following: On Thursday 22 February I planned to finish the lecture on orientation (discussing examples on the pages 22, 23) then I planned to spend 10-15 minutes to repeat the content of lecture on orientation of linear operator (page 24), and then I planned to begin the subsection 1.7 of lecture notes devoted to *orthogonal operators in 2-dimensional and 3-dimensional Euclidean spaces*. Orthogonal operator preserving orientation in  $n$ -dimensional Euclidean vector space  $\mathbf{E}^n$  is just rotation in the case if  $n = 2, 3$ . You almost know it for  $n = 2$  from the course of Linear algebra. The subsection 1.7.1 (pages 25,26) are devoted to orthogonal operator in this simple case: operators in  $\mathbf{E}^2$ . This I planned to read on Thursday 22 February and I wanted to finish the simple (2-dimensional case) tomorrow on Wednesday 28 February. Then I wanted to begin tomorrow on Wednesday the central, most important (and beautiful) part of subsection 1.7: *orthogonal operators and rotation in 3-dimensional Euclidean vector spaces*.

Unfortunately, due to the given circumstances, this does not work, and I am forced to begin this part of the lecture on Thursday. Finally this is only the subsection 1.7.1 on rotation in  $\mathbf{E}^2$  will not be delivered during lectures. Of course I will bear in mind this fact during future lectures. The Homework 3 (which half of students will not attend) will be devoted to discussion of rotation operators in 2-dimensional space. (Students who regularly attend Wednesday tutorials, and who are capable to come on tutorial on Thursday are welcome!)

You see on my webpage I put the content of the next lecture on rotation in  $\mathbf{E}^3$ . I plan on Thursday March 1 to begin the lecture with a short review of missed lecture (subsection 1.7.1) then to begin the subsection 1.7.2. I hope that the lecture which I will read will be close to these notes. I will change the notes if necessary after the lecture.

Finally I would like to tell you that I realise well that you are not happy with these circumstances. I am not happy also. Hope that we can soon to return to normal life.

Yours sincerely

Hovhannes Khudaverdian 27 FEBRUARY 2018