

Tutorials to draw geometry

Design esthetic trim wheels for this ZE car...

1 Assignment and final task.

This is a team work using mathematics to conceive esthetic wheel trims for the car. First task is to draw onto a poster to be seen onto the car itself a geometry diagram titled "the Euler Line".

Second task is to draw onto a poster to be seen onto the car a new diagram for the wheel trim as a suggestion for an esthetic such wheel trim.

Third task is to explain in a video the work procedure AND directions to dictate these diagram to somebody else who would be drawing for you.

Feel free to share roles according questions on a voluntary basis. All members of the team have to speak equally when filming. Be creative!

2 The problem and work procedure.

ZE car is designed by Renault, French car manufacturer with its own wheel trims. Are these esthetic? Do you like them? Could you modelise these with directions in geometry? The task is to design your own favorite wheel trims for this car.

1. View the film "Euler Line" , throw all mathematics words onto the brainstorming poster and discuss to ensure that you understand it all.
2. Perform the diagram yourself onto the poster as a draft.
3. Think of instructions to give to dictate that diagram to somebody else. One student is dictating instructions while another is drawing according to these instructions.
4. Write instructions for the present wheel trims of the car.
5. Create your own design for new wheel trims and write associated drawing instructions.
6. An example video to give ideas can be seen in the video titled "Construction II - tangent line to circle construction"

3 Elements needed in the video.

Remember, YOU are the experts in sciences stating the problem and finally solving it for an international audience of your presentation. Don't be boring! Audience surely appreciates clear reasonings as well as creativity when listening to you!

Your video should contain the following elements :

- an introduction to give the final tasks, shown in the video,
- perform a simple drawing while corresponding instructions are given orally, for example 5 to 7 instructions using appropriate geometry words.
- explain work procedure based on example videos,
- perform the Euler Line diagram and express corresponding directions,
- perform the new diagram to suggest an esthetic wheel trim and express corresponding directions,
- show students putting the posters onto the car body of ZE vehicle,
- comment on what was easy or difficult, on which part of the diagram you think are esthetic, etc...