# using videos in teaching Mathematics

Using videos in teaching mathematics has a lot of advantages. Whether it is to repeat the curriculum, to lecture those who can’t physically attend, or for whole other reasons. The video “Bruk av video” talks shortly about the advantages and disadvantages of different types of video.

When making videos for teaching mathematics, there is a lot to have in mind. *Should the lecturer be in the picture? Should the video be somewhat static, with presented mathematics and calculations? Or should the video be more dynamic, with calculations happening “live” in the video? How prepared should the video be? Blackboard or prepared slides?* These questions, and many more, are questions one might ask before making a video. We don’t think there necessary is **one** answer to what makes a good video. However, it is important to reflect on certain aspects before making and using videos in teaching mathematics. Some important questions are:

* What is the purpose of the video? What kind of videos best serves this purpose?
* To what extent do you want to activate the viewer?
* How do you want to activate the viewer?

What kind of video you would like to make, often depends on the purpose and the desired degree of activation. There is no general way to make the “best” video, but we have experienced some things worth mentioning:

* It is often an advantage to have the lecturer in the picture, together with the content which is presented. This encourages the students to “take part” in the lecture, and one feels that they are doing the mathematics *together* with the lecturer to a greater extent.
* It is often an advantage to make a somewhat dynamic video, rather than static. This gives an impression to the viewer that they are doing the mathematics *with* the lecturer, and it is often preferable to see what happens during the mathematics and calculations, rather than just skip to the results.

Of course, these points are not always the case, and one must think about the purpose of their own video when choosing the type of video. For example, it could be preferable to have a more static video when going through definitions or already lectured topics, and giving the viewer a chance to pause the video and examine the still images of the video.