2) Photographic camera
   a) [10 points] The size of a standard 35 mm negative is actually 25×36 mm². If you use a 50 mm focal length lens, what would be the field of view at a distance of 5 m?
   b) [15 points] Suppose you take a picture of a group of your friends standing at this distance of 5 m, with a lens opening of f/5.6 and shutter speed of 1/250 sec. Now you change the opening to f/16. What shutter speed should you use to keep the same exposure? What happens to the depth of focus in your picture?