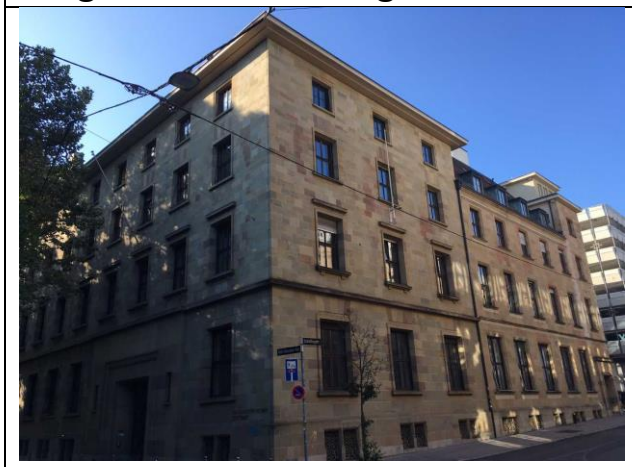
Generic Tasks: Height of Buildings

Height of the Building	Determine the height of the building!
  It is important to highlight in the picture which part of the building is meant.	Data to be measured: Depending on the building, there are several possibilities to determine the height: 1. With help of the intercept theorems 2. With help of symmetry or patterns Solution: 1. One can approximate the height with help of the intercept theorem. To do so, one chooses an appropriate place, positions oneself with outstretched arm and folding rule and fixes the upper and lower end of the building, as well as a suitable piece, which can be measured directly at the building. The corresponding values are read off the folding rule and compared to the actual size. Alternatively, one can use signs or lamps whose height can be measured. 2. One looks for regularities and patterns, like plates or tiles. These are measured in length and counted. The height is calculated by multiplication. Possible Hints: • Search for regularities at the building. • Use the plates/tiles/… to determine the height. • Think about how to use the intercept theorems. • Make a sketch of the situation. • Position yourself with outstretched arm and folding rule so that the folding rule covers the wall of the building and read off the values for the upper and lower end of the building. Now find a piece of the building wall that you can measure and fix these points with the folding rule. With the intercept theorems you get the height of the building.