Problem-Solving

We want to give out as few candies as possible, but everyone should get at least one.

So we can start assigning candies to those kids that, with these assumption, are no longer influenced by the *amount* of candies of their neighbors: i.e. all the Minimum Values of the function: Order Number \mapsto Exam grade.

To these kids we give exactly 1 candy.

In the example they would be Ander and Freya.

Then we proceed step by step giving one more candy to the neighbors of those people whose candy we already assigned.

When we reach a Maximum Value we wait until we have both its possible assignments of candies and we choose the highest value, since they have to have more candies than either of their neighbors.

In this case the minimum amount of candies required is 27.

Below you can find a gif showing the procedure. Unfortunately, it does not work on every pdf-viewers/PC.