Ackermann function

[](http://www.rosettacode.org/wiki/Category:Solutions_by_Programming_Task)

**Ackermann function**  
You are encouraged to [solve this task](http://www.rosettacode.org/wiki/Rosetta_Code:Solve_a_Task) according to the task description, using any language you may know.

The [**Ackermann function**](https://en.wikipedia.org/wiki/Ackermann_function) is a classic example of a recursive function, notable especially because it is not a [primitive recursive function](https://en.wikipedia.org/wiki/Primitive_recursive_function). It grows very quickly in value, as does the size of its call tree.

The Ackermann function is usually defined as follows:

Ein Bild, das Text enthält.

Automatisch generierte Beschreibung  
Its arguments are never negative and it always terminates.

**Task**

Write a function which returns the value of {\displaystyle A(m,n)}. Arbitrary precision is preferred (since the function grows so quickly), but not required.

**See also**

* [Conway chained arrow notation](https://en.wikipedia.org/wiki/Conway_chained_arrow_notation#Ackermann_function) for the Ackermann function.