## **Object-oriented programming - Java**

## class Math

The class Math contains methods for performing basic numeric operations such as the elementary exponential, logarithm, square root, and trigonometric functions.

https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html

## Use class Math to do the following exercises:

- 1. Display the absolute value of -10.
- 2. Use method *pow* to display 2<sup>6</sup>.
- 3. Use method sqrt to display  $\sqrt{16}$  and  $\sqrt{81}$ .
- 4. Declare two integers and display the greater one. Use function *max* from class Math.
- 5. Declare two variables type double and display the greater one. Use function *max* from class Math.
- 6. Write a static function (type double) that calculates and returns the value of the function  $y=2*e^x$  at the point x (type double) given as its parameter.
- 7. Write a static function (type double) that calculates and returns the value of the function **y=log(x)+1** at the point x (type double) given as its parameter.
- 8. Write a static function that calculates and returns the area of the circle (radius is the only parameter of this function).
- 9. Write a static function (type void) that calculates and displays the value of the function y=2\*sin(x)+cos(x) at the point x given as its parameter.