

## Fundamentals of Programming 1 5%

### Exercise sheet 1 - All questions must be attempted

#### Question 1

Write a Java program that produces the following output. Name your program

**Question1.java**

```
Java Programming
Rocks
```

#### Question 2

Write a Java program that prints the answers to the following arithmetic expressions on separate lines. Name your program **Question2.java**

**NOTE:** your program should print the linear expression and the result.

1.  $4 \times 4 =$
2.  $3 \times 7 + (-2 \times -8) =$
3.  $\frac{(2 \times 5) - 6}{(4 \times 8) - 30} =$

#### Question 3

Write a Java program that uses two variables **x** and **y** to store the values **71** and **3.14**. Your program should print the values stored in **x** and **y** to the screen. Name your program **Question3.java**

```
x = 71
y = 3.14
```

#### Question 4

An employee receives an hourly rate of €9.80 and works 42 hours a week. Write a Java program that calculates the employees gross weekly wage and prints it to screen.

**NOTE:** be very careful when choosing variable types and their names. Name your program **Question4.java**

```
Hourly rate is 9.8
Hours worked is 42
Gross weekly is 411.6
```

### Question 5

Given the following function  $f(x) = x^2 + 3x - 5$ , write a Java program to evaluate  $f(x)$ , **where**  $x = 4$ . Your program should use a variable called  $x$  and print the linear arithmetic expression along with the result. Name your program **Question5.java**

**NOTE:**  $x^2$  can be written as  $(x * x)$ .

### Deliverables

Save your Java solutions to questions 1,2,3,4 and 5 **Week1**. Zip the Week1 folder and upload the zip file using the Week1 upload link for your group on MOODLE. **Remember to only include the .java source files.**

### Plagiarism

This assessment should be an individual piece of work. Any evidence of plagiarism will result in a grade of zero for all parties involved and will trigger the Universities plagiarism policy 3AS08 (see course coordination page).