

WIX1002 Fundamentals of Programming
Semester 1 2015/2016
Tutorial 6 Java Methods

1. Write statements for each of the following
 - a. Define a static method that returns the maximum number from 3 integer parameters.
 - b. Define a static method that determine whether the given integer is a square number.
 - c. Define a static method that use to compute combination function $C(n,k)$. $C(n,k)$ gives the number of different k-element subsets that can be found in a given set of n elements. $C(n,k) = n! / (k! (n-k)!)$
 - d. Define a static method that used to determine whether the parameter is a pentagonal number. A pentagonal number is a figurate number that extends the concept of triangular and square numbers to the pentagon. $P_n = \frac{1}{2} n(3n - 1)$
 - e. Define a static method that displays the number of letters and the number of digits of a String parameter.
 - f. Define a static void method that generates 10 random numbers within 0 to 100 to the method's parameter. The random numbers can be accessed by the main method.
 - g. Define a static void method that returns the area and the circumference of a circle given the argument is radius. $\text{Area} = \pi r^2$ and $\text{Circumference} = 2 \pi r$.
 - h. Define a static method that generate random number within 0 – 10. The method will return the first random number that generate twice.