1. (10 points) What is the output of the following statements:

(a) int num1 = 14;
    if ( num1 < 20 )
        System.out.print("Under");
    else
        System.out.print("Over ");
    System.out.println("the limit.");

(b) int num2 = 20;
    if ( --num2 <= 20 )
        System.out.print("Under ");
    else
    {
        System.out.print("Over ");
        System.out.println("the limit.");
    }

2. Evaluate whether the following are true or false:

   Hint 1: Arithmetic operators (like *,+,−,/) have higher precedence than other operators (like <,>,>=,==,&&,||)
   
   Hint 2: Relational operators (like <,>,>=,== ) have higher precedence than logical operators (like &&,||)

   Hint 3: The parenthesis operator has higher precedence than all the previously mentioned operators.

   (a) 1+2 > 4−2 && 12 < 23

   (b) 1+2 > 4−2 || 12 < 23
(c) $1 + 2 > 4 - 2$ \&\& $54 > 76$

(d) $1 + 2 > 4 - 2$ || $54 > 76$

(e) $(1 == 1)$ || $(5 - 7 + 20 < 0)$