## Introduction.

This handout is a supplement to the code file **risk\_rolls.cpp**. Please read that file first, and then look here for extra details as you need them. All of the work in this lab is for you to fill in the definitions of the functions in **risk\_rolls.cpp**.

This supplement explains the rules of Risk which pertain to rolling dice and losing armies.

Nothing is due for this lab.

## **Risk rules:**

These are the rules for deciding what happens when one player attacks another:

- Attacking players can roll up to three dice, and defenders can roll up to two.
- Compare the largest attacking die roll with the largest defender die roll. Whoever is smaller loses one army. The defender wins ties.
- If both players rolled more than one die, also compare the second largest attacker die roll with the second largest defender die roll. Whoever's is smaller loses one more army. The defender still wins ties.

Here are some examples:

Attacker Rolls	Defender Rolls	Outcome
3, 1, 6	4, 1	defender loses two armies
1,1,6	5	defender loses one army
4	3,6	attacker loses one army
1, 3	1, 3	attacker loses two armies
5, 4	4, 3	defender loses two armies
6	2	defender loses one army

The lab focuses on the case where the attacker rolls 2 dice, and the defender rolls 1. Here are some more examples of just this case:

Attacker Rolls	Defender Rolls	Outcome
3, 3	3	attacker loses one army
2, 5	4	defender loses one army
3, 2	6	attacker loses one army
6, 5	1	defender loses one army