## **BNF Worksheet**

(If you have some time, try to draw the syntax diagrams for each question on the back.)

1. BNF for Natural Numbers

e.g. 1, 2, 3, ....

Hint: 0 does not count as a Natural Number, but we still need it to make numbers like 10, 20, 1098, 40908, etc.

2. BNF for Integers

e.g. ...., -2, -1, 0, 1, 2, ....

Hint: Notice we need both positive and negative numbers.

3. BNF for Unsigned Integers

e.g. 0, 1, 2, 3, ....

Hint: We no longer need to distinguish negative and positive numbers and we do count 0 as an unsigned integer.