Assembly and Machine Language Homework 2

Create an assembly program which reads three integers, **a**, **r** and **n**, from the standard input and prints first **n** terms of the geometric and arithmetic series, generated using the following equations:

- Geometric series:

$$G_k = a.r^k$$

- Arithmetic series:

$$A_k = a + k.r$$

- **k** starts from 0
- **n** is nonnegative, but **a** and **r** can be both positive or negative. Thus, use signed arithmetic.
- Use the commands you have learned so far.
- Use the **read_int** and **print_int** function from the book for I/O.
- Very similar codes will not be graded.

Example:

Input:
```
2       ; a
3       ; r
4       ; n
```

Output: (geometric serie [newline] arithmetic serie [newline][newline])

2   ; a

2   ; a

6   ; ar

5   ; $a+r$

18   ; ar^2

8   ; $a+2r$

54   ; ar^3

11   ; $a+3r$