<u>Arithmetic Sequence</u> - there is a common _____
(you _____ the same number every time)

5, 10, 15, 20, 25, ... or   30, 28, 26, 24, 22, ...

$$t(n) = mn + b \quad \text{or} \quad a_n = mn + a_0$$

_____ = the common difference

_____ = the term number (the 4th term, the 5th term, etc)

_____ or _____ = the zeroth term - the one <u>before</u> the first term
              you see in the list

_____

<u>Geometric Sequence</u> - there is a common _____ or
_____ (you_____ by the same number every time)

3, 6, 12, 24, 48, ...   or   200, 100, 50, 25, 12.5, ...

$$t(n) = ab^n \quad \text{or} \quad a_n = a_0 \cdot b^n$$

_____ = the common ratio (multiplier) or the sequence generator

_____ = the term number (the 4th term, the 5th term, etc)

_____ or _____ = the zeroth term - the one <u>before</u> the first term
              you see in the list

_____

In <u>recursive</u> sequences (arithmetic <u>or</u> geometric):

_____ = the nth term

_____ = the term <u>BEFORE</u> the nth term (the <u>PREVIOUS term</u>)

_____ = the term <u>AFTER</u> the nth term (the <u>NEXT</u> term)