

QUICK TIP!

Hey Kids! Time For a super
Fun math lesson, courtesy of
Math Madness!

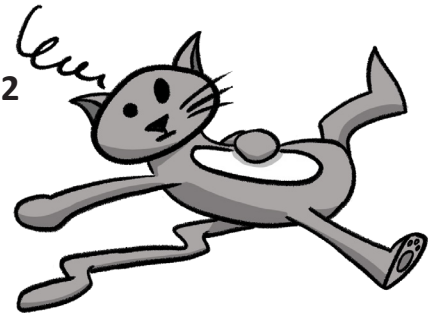
NUMBER SEQUENCES

In math, a sequence is an ordered set of numbers. Many sequences are defined by rules that can be used to calculate the number at each place. If we know the rule, we can use it to calculate additional numbers in the sequence.

One common kind of sequence is the arithmetic sequence. In this type of sequence, each number is generated by adding or subtracting a constant value from the last number. For instance, the sequence: 1,3,5,7,9,... starts with the number 1. Each following number is generated by adding 2 to the previous number.

Another common type is the geometric sequence. In this type of sequence, each number is generated by multiplying or dividing the previous number by a constant value. For example, the sequence 1,5,25,125,... starts with 1. Each following number is generated by multiplying the previous number by 5.

- 0,8,16,24,32,... starts with 0, rule is to add 8
 1,2,4,8,16,32... starts with 1, rule is to multiply by 2
 6,11,16,21,26... starts with 6, rule is add 5
 10,30,90,270,... starts with 10, rule is multiply by 3

**TRY IT!**

Determine the start, rule and next number for each sequence.

Sequence	Start	Rule	Next Number
4,6,8,10,12,...	_____	_____	_____
21,28,35,42,49,...	_____	_____	_____
3,9,27,81,243,...	_____	_____	_____
5,8,11,14,17,...	_____	_____	_____
2,10,50,250,1250,...	_____	_____	_____