A **sequence** is a list of numbers in some regular pattern. There is always a rule to figure out the next number from the other numbers.

A really simple example is 1, 2, 3, 4, 5, 6, . . .

The dots at the end means that the sequence keeps going on forever, but we don't want to write all the rest of the numbers.

In the sequence above, to get to the next number, you just add one to the previous number. For other sequences, you add another number each time.

In some sequences, the number you add each time changes in some way. It might get bigger and bigger, like in the sequence  $2, 3, 5, 8, 12, \ldots$ 

In other sequences, to get the next number, you need to multiply by something each time.

In some cases, you need to use the previous two numbers to figure out the next number.

A good way to guess what the rule is for a sequence is to write down how much bigger each number is than the previous number. Or how many times bigger it is. Then look for a pattern. A) 3, 6, 9, 12, 15, ... Answer: Team name:What is the pattern:

B) 2, 3, 5, 8, 12, ... Answer: Team name:What is the pattern:

C) 3, 6, 12, 24, 48, ... Answer: Team name:What is the pattern:

D) 2, 7, 5, 10, 8, 13, ... Answer: Team name:What is the pattern:

E) 75, 71, 67, 63, . . . Answer: Team name:

What is the pattern:

F) 1, 2, 6, 24, ...Answer:Team name:What is the pattern:

G) 1, 4, 5, 9, 14, 23, ... Answer: Team name:What is the pattern:

H) 1, 4, 10, 19, 31, ... Answer: Team name:What is the pattern:

I) 1, 21, 321, ...Answer:Team name:What is the pattern:

I) 1, 4, 9, 16, 25, ... Answer: Team name:What is the pattern:

J) 2, 6, 18, 54, ... Answer: Team name:

What is the pattern:

 K) 1, 3, 7, 15, 31, ...
 Answer:
 Team name:

 What is the pattern:
 Team name:

L) 1771, 1881, 1991, 2002, ... Answer: Team name:What is the pattern:

BONUS (Hand in to me): 1, 11, 21, 1211, ... Answer:

Team name:

What is the pattern: