



## Problem of the Week

### Problem A

### Following Directions

Yeni is playing a game that uses a  $12 \times 12$  grid like the one shown below. She moves pieces on the grid by giving a sequence of steps. Each step is a direction indicated by an arrow:  $\uparrow$  (up one block),  $\downarrow$  (down one block),  $\leftarrow$  (left one block), and  $\rightarrow$  (right one block).

Yeni has a special move which combines six steps:  $\rightarrow \rightarrow \downarrow \downarrow \leftarrow \uparrow$

A) Yeni starts by putting a marker (**X**) at position A1.

	A	B	C	D	E	F	G	H	I	J	K	L
1	<b>X</b>											
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

What is the position of the marker after making the special move three times in a row?

B) How many more times can she repeat the special move before the marker will move off the grid?

