

`int *p;`

p is a pointer to a single int
or a pointer to an array of ints.

p: ?

They are the same thing - every array begins with a single int.

`int ** A;`

one interpretation:

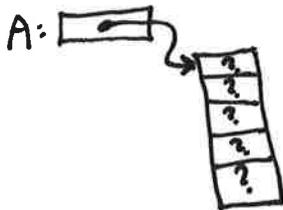
A is a pointer to an array of pointers to arrays of ints.

A: ?

`A = new int * [5];`

make an array of 5 int*'s;

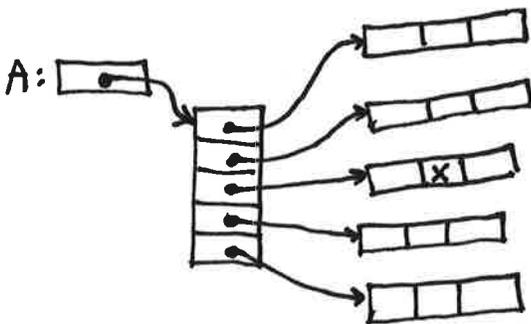
an int* is a pointer to an array of ints.



`for (int i=0; i<5; i+=1)`

`A[i] = new int [3];`

`A[i]` becomes a pointer to an array of 3 ints.



This is like a 5x3 two dimensional array of ints

`A[2]` is row number 2

`A[2][1]` is item number 1 in row number 2: marked X in the diagram.