How many Counter objects were created?

A total of <2> Variables declared in main() are different to the objects created when we call new.

What is the relationship between the declared variables in main and the objects created?

Variables < contain pointer to> objects. Variables declared in main would be on stack which is having memory address for objects created on the heap

Resetting the counter in myCounters[2] also changes the value of the counter in myCounters[0]. Why does this happen?

myCounter[2] and myCounter[0] [ are pointing to the same object memory, so any changes to the pointed object would be reflected at both variables ]

The key difference between memory on the heap compared to the stack and the heap is that the heap holds dynamically allocated memory. What does this mean?

Dynamic memory allocation means system will automatically allocate memory for the object on heap and memory address returned to the variable which hold the object

On which are objects allocated (heap or stack)? On which are local variables allocated (heap or stack)?

Objects are allocated on the [ heap ] Local variables are allocated on the [ stack ]

What does the new() method do when called for a particular class What does it do and what does it return? When new is called on a class it < creates the object of that class> then it returns < memory address of the new initialize object >