

# Pointers & References in C++

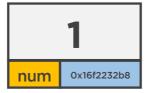
A reference variable is a "reference" to an existing variable, and it is created with the & operator.

A pointer however, is a variable that stores the memory address as its value.

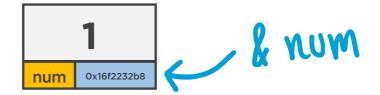
A pointer variable points to a data type (like *int* or *string*) of the same type, and is created with the \* operator.

The address of the variable you're working with is assigned to the pointer

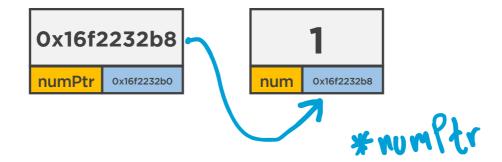
```
int num = 1;
```



int num = 
$$1$$
;



```
int num = 1;
int * numPtr = & num;
```



Update 'num' value using the 'numPtr'

$$*numPtr = 2;$$

