

# Variable Cheat Sheet Number Edition



Facts	Whiteboard example	Algorithm Examples	Code examples
If you want to store a number and use it again you need to assign it to a variable. At the beginning of each program you need to initialise the variable, give it a starting value.		Assign 0 to score Assign 0 to the variable called score Assign 0 to var score Make variable score same as 0 Make score = 0	Scratch 2.0 Scratch 3 Python example <code>score=0</code>
You can change a number value in a variable by adding, subtracting, multiplying or dividing by a number.	<p>On a whiteboard you will have to do the maths yourself</p>	Add three to variable called score +3 to score Subtract 3 from score variable Multiply score by 3 Divide var score by 2 X score variable by 3 / score by 2	Add 3 <sup>(1)</sup> Divide by 2 Multiply by 3 Python example <code>score = score +3</code>
You can add, subtract, multiply or divide variables and put the new total in another variable. <i>(stick to one operation per line if you don't know the order of operations)</i>		<code>num1 + num2 = total</code> <code>total = num1 + num2</code> Add num1 to num2 and put result in total <code>num1 times num2 = total</code> <code>total=num1*num2</code> Divide num1 by num2 and put into total	Multiply Subtract Python example <code>total = num1 + num2</code>
If you want to show what is assigned to a variable you can say it, print it or show it on screen.	Read out loud what value is assigned to this variable shown on the whiteboard	Say total Print total Show the total on screen	 Python example <code>print (total)</code>
A variable with a number assigned can replace any number in your algorithm or program.		Walk num1 steps Turn right num2 degrees Jump num1 times Wait for total seconds	
A user can input a number into a variable on your algorithm or program.	Assign a value to this variable by writing it on the whiteboard	Ask the user what their favourite number is and put their answer into a variable called fav_num	

/ is used on a computer for divide. \* is used on a computer for multiply.

<sup>(1)</sup> You can also add and subtract like this

