Math

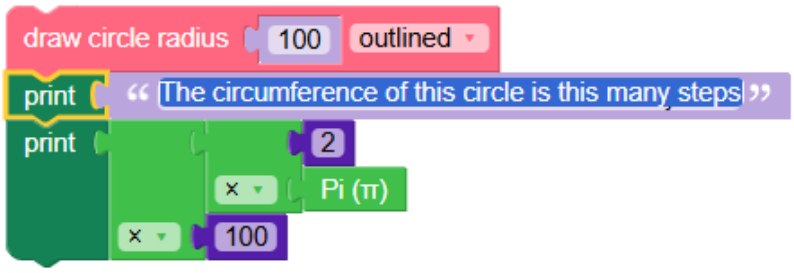
With these **Math** blocks, you can work with numbers in many different ways. Even though a couple of these blocks were covered in the **Intermediate** tutorial, they are also included here.

Use this block when you want to insert a number into a block. You can change 12345 to any number you want. You have seen and likely used this block before.

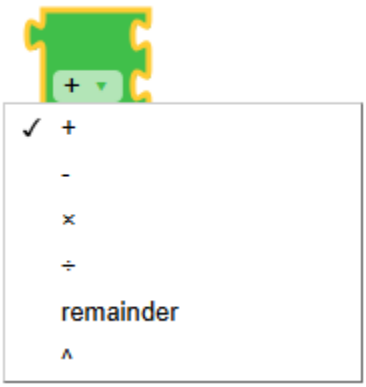
The block gives you the value of *pi*, which is written as π. *Pi* is a value used to compute the circumference and area of circles.

The circumference of a circle is 2πR, or 2 times *pi* times the length of the radius.
The area of a circle is πR^2, or pi times the radius squared.

Here is code that computes the circumference of a circle.



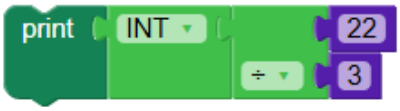
Can you write the code to figure out its area using *pi*?



Use the ***operations*** block when you want to do math. Connect a number block (see above) in both spots. You can then add, subtract, multiply, or divide them, find the remainder, or use an exponent. Three to the second power, or three squared, is an example of an exponent, written like this: 3^2. It means 3 x 3 or 9.

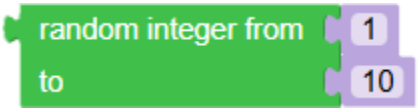
For more examples, see the Intermediate tutorial.

INT is short for INTEGER. This block takes a number as input and returns a whole number, like this:



The input is 22/3. The integer result is 7.

If you remove the ***INT*** block, the result is no longer a whole number. It is a decimal. See the difference?



You've already seen examples of using the ***random*** block. Anytime you need a random number, just replace the current value with this block. Enter numbers for the range you want and see what happens!