

Name:

Date:

Mathematical and Comparison Operators

After you have matched the operator symbols, names and functions in the large table using the colours. Write them up neatly in the correct section of the table below for your folder.

Remember: a mathematical operator performs a calculation or assigns value, a comparison compares (checks) values.

	Operator symbol	Name	Function
Mathematical operators			
Comparison Operators			

Extra challenge

Can you find out what the extra mathematical symbols below are called and what they do?

	Operator symbol	Name	Function
Mathematical operator	+=		
	-=		
	**		
	%		

Demonstrate your knowledge and understanding

1. Create a new file and type in the following code.
2. **Add lines of code that will verify (check) that the user has entered a valid number for both X and Y.**
3. Then save this as 'addition.py' and run it.

```
x = int(input("Enter a number between 1 and 100: "))
y = int(input("Enter another number between 1 and 100: "))
print("X + Y =", x+y)
```

4. **Subtraction:** Repeat the last program, but this time make it subtract the two numbers. Save it as "subtraction.py" and test it works.
5. **Multiplication:** Repeat the last program, but this time make it multiply the two numbers. Save it as "multiplication.py" and test it works.
6. **Division:** Repeat the last program, but this time make it divide the two numbers. Save it as "division.py" and test it works.
7. **Square:** Repeat the last program, but this time make it calculate x^2 . Save it as "square.py" and test it works.
8. **Powers:** Repeat the last program, but this time make it calculate x^y . Save it as "powers.py" and test it works. (Hint: use $x**y$)
9. **Mod:** Repeat the last program, but this time make it calculate the modulus (remainder) of a division. Save it as "mod.py" and test it works. (Hint: use $x\%y$)

Extra Challenge 1 : Order of Operations / BIDMAS:

Try writing a program that will take a number, multiply by three and then add four.

Try writing a program that will take a number, add four and then multiply by three.

Put the number 7 into both programs and check that they work correctly.

Extra Challenge 2: Create a new maths quiz using the new operators that you have learnt today