Computer Science 1	Exercises 04.01-03	Date:
Name:		Period:

1.   A _____ stores a value that is able to change.

2.   In an expression like **7 – 5**, what is the *operator* and what are the *operands*?

In questions 3 through 22 print the exact output of the program statement.

3.   **print(5 + 6)**   4.   **print(10 – 3)**

5.   **print(9 * 7)**   6.   **print("10 – 3")**

7.   **print(7 / 4)**   8.   **print(7 // 4)**

9.   **print(7 % 4)**   10.   **print(10 ** 4)**

11.   **print(23 ** 1)**   12.   **print(23 ** 0)**

13.   **print(4 ** -1)**   14.   **print(36 ** 0.5)**

15.   **print(23 – 4 * 5)**   16.   **print(6 + 9 / 3)**

17.   **print((23 – 4) * 5)**   18.   **print((6 + 9) / 3)**

19.   **print(4 * 3 ** 2)**   20.   **print((4 * 3) ** 2)**

21.   **print((2 ** 3) ** 2)**   22.   **print(2 ** 3 ** 2)**

23.   What is the difference between **print(x)** and **print("x")** ?

24.	In Python, when does a variable become *defined*?

25.	Look at program **Variables03.py**. Why does it not execute?

In questions 26 and 27 print the exact output of the program segment.

26.	a = 10
	b = 20
	c = a + b
	print(a,b,c,sep="#")

27.	j = 100
	j = j + 50
	print("The answer is",j)

28.	Which 2 mathematical operators are not really meant to be used with real numbers?

In questions 29 through 32 print the exact output of the program segment.

29.	a = 10.0
	b = 2.5
	c = a + b
	print(c)

30.	a = 10.0
	b = 2.5
	c = a – b
	print(c)

31.	a = 10.0
	b = 2.5
	c = a * b
	print(c)

32.	a = 10.0
	b = 2.5
	c = a / b
	print(c)

In questions 33 through 36 translate the mathematical expression into Python code.

33.	**7PQR**

34.	$r^2 + d^2$

35.	$\dfrac{2}{3}$

36.	$\dfrac{C - D}{C + D}$