

Name: **SOLUTION**

For the programs on this quiz:

- If a program prompts the user for input, take on the role of the user and provide the input (underline the user's input).
- If the program throws an error/exception, indicate that (including the line on which the error occurs).
- In the output, make it clear whether or not there are spaces.

1. What are the results of the following operations (1 point each):

Operation	Result
<code>>>> 5 + 3 ** 2</code>	14
<code>>>> x = 5</code> <code>>>> x % 2 - 1</code>	0
<code>>>> 7 / 3</code>	2.33333
<code>>>> 3 * 2 + 5 // 4</code>	7
<code>>>> a = "cat"</code> <code>>>> b = "dog"</code> <code>>>> a + b</code>	'catdog'
<code>>>> x = 5</code> <code>>>> x *= 2</code> <code>>>> x</code>	10

2. Which of the following are valid variable names in Python (select all that apply, +1/2 for each correctly selected, -1/4 for each incorrectly selected):

a. favorite_pet**b. MAX_PETS_ALLOWED**

c. vet#

d. pet count

e. bird2

(bold are valid variable names)

3. What is the output of the print function call below: (3 points)

```
>>> count = 1
>>> favorite = "bird"
>>> print("I have", count, "pets. My favorite is "+favorite.upper()+".")
```

I have 1 pets. My favorite is BIRD.

4. Continuing from #3 above, what is output from this print function call: (1 point)

```
>>> print(favorite)
```

bird

5. Show the output of the program below. (5 points)

```
name = input("Your name: ")
num = input("Favorite number: ")
print(name, ", your favorite number is:", num)
x = num + 2
print("num + 2 =", x)
```

Your name: Michael

Favorite number: 2

Michael , your favorite number is: 2

Program has an error on the next line! Cannot add 2 to a string (num).

6. The `difflib` module in Python is useful for comparing and searching through strings. In the space below, write the code to gain access to the `difflib` module in your program. (1 point)

```
import difflib
```