

Name: _____
DATA 101 — Fall 2025
Quiz #3
Sept. 19, 2025

1. Define these terms:

(a) **independent variable**

(b) **dependent variable**

(c) **confounding factor / confounding variable**

(d) **correlation** (or **correlated**)

(e) **causality**

2. Fill in the blanks: in order for a variable to be a **confounding** variable, it must affect both the _____ and the _____.

3. What does the following Python code print to the screen when it's run? (Give the entire output – all five lines that are printed.)

```
prices = np.array([6, 9, 10, 3, 5])
inflation = prices + 2
flip_me = np.flip(prices)
print(prices[0])
print(len(prices))
print(inflation[2])
print(flip_me)
print(prices[1:4])
```

4. What does the following Python code print to the screen when it's run? (Give the entire output – all four lines that are printed.)

```
aces = np.array([ "Aja Wilson","Jackie Young","Chelsea Gray" ])
mercury = np.array([ "Sami Whitcomb","Lexi Held","Satou Sabally" ])
phoenix = mercury
las_vegas = aces.copy()
phoenix = np.append(phoenix,"Alyssa Thomas")
extras = np.array([ "Jewell Lloyd","Megan Gustafson","Kierstan Bell" ])
las_vegas = np.concatenate([las_vegas,extras])
las_vegas = np.delete(las_vegas,2)
phoenix = np.delete(phoenix,1)
print(mercury[1])
print(aces[len(aces)-1])
print(len(phoenix))
print(len(las_vegas))
```