

Worksheet 2 Review

April 10, 2020

Question 1

- a. One example is $x = \text{Aizah}$ and $y = \text{Aizah}$.

There are more than one possible answer. The following examples also show truthiness of the statement.

- $x = \text{Carlos}$ and $y = \text{Carlos}$
- $x = \text{Ellen}$ and $y = \text{Ellen}$

- b. One example is $x = \text{Betty}$ and $y = \text{Aizah}$.

There are more than one possible answer. The following examples also show truthiness of the statement.

Part 1 ($\neg \text{Rich}(x)$ - True, $\neg \text{SameDept}(x, y)$ - False):

- $x = \text{Betty}$, $y = \text{Betty}$
- $x = \text{Betty}$, $y = \text{Doug}$
- $x = \text{Doug}$, $y = \text{Aizah}$
- $x = \text{Doug}$, $y = \text{Betty}$
- $x = \text{Doug}$, $y = \text{Doug}$
- $x = \text{Flo}$, $y = \text{Ellen}$
- $x = \text{Flo}$, $y = \text{Flo}$

Part 2 ($\neg Rich(x)$ - **False, $\neg SameDept(x, y)$ - **True**):**

- $x = \text{Aizah}, y = \text{Carlos}$
- $x = \text{Aizah}, y = \text{Ellen}$
- $x = \text{Aizah}, y = \text{Flo}$
- $x = \text{Carlos}, y = \text{Aizah}$
- $x = \text{Carlos}, y = \text{Betty}$
- $x = \text{Carlos}, y = \text{Doug}$
- $x = \text{Carlos}, y = \text{Ellen}$
- $x = \text{Carlos}, y = \text{Flo}$
- $x = \text{Ellen}, y = \text{Aizah}$
- $x = \text{Ellen}, y = \text{Betty}$
- $x = \text{Ellen}, y = \text{Carlos}$
- $x = \text{Ellen}, y = \text{Doug}$

Part 3 ($\neg Rich(x)$ - **True, $\neg SameDept(x, y)$ - **True**):**

- $x = \text{Betty}, y = \text{Carlos}$
- $x = \text{Betty}, y = \text{Ellen}$
- $x = \text{Betty}, y = \text{Flo}$
- $x = \text{Doug}, y = \text{Carlos}$
- $x = \text{Doug}, y = \text{Ellen}$
- $x = \text{Doug}, y = \text{Flo}$
- $x = \text{Flo}, y = \text{Aizh}$
- $x = \text{Flo}, y = \text{Betty}$
- $x = \text{Flo}, y = \text{Carlos}$

Question 2

Question 3