

Name \_\_\_\_\_

### Investigation 10: Is There an Association?

#### Worksheet 10.2 Scenario 2

Many schools, nursing homes, and residential communities are making therapy pets available to address anxiety and depression. Dogs and cats are most commonly used in pet therapy. However, fish, guinea pigs, horses, and other animals that meet screening criteria can also be used. The type of animal chosen depends on the therapeutic goals of a person's treatment plan. In selecting a therapy pet for a person there is debate as to whether females and males have different preferences in the selection of their therapy pets.

Source: <https://www.healthline.com/health/pet-therapy>

Statistical Question \_\_\_\_\_

#### Analyze the Data

1. Using the frequency table, complete the row conditional relative frequencies based on gender.

#### Frequency Table

	A. Dog person	B. Cat person	C. Neither	Total
Female	8	22	3	33
Male	15	2	0	17
Total	23	24	3	50

#### Row Conditional Relative Frequency Table

	A. Dog person	B. Cat person	C. Neither	Total
Female				
Male				
Total				

#### Interpret the Results in the Context of the Original Statistical Question

2. What is the proportion of students who consider themselves a dog person?
3. What is the proportion of males who consider themselves a dog person?

4. What is the proportion of females who consider themselves a dog person?
5. If a survey from the sample indicated the student completing the survey was male, what is your estimate he considers himself a dog person?
6. If a survey from the sample indicated the student completing the survey was female, what is your estimate she considers herself a dog person?
7. If a survey from the sample indicated the student completing the survey was male, what is your estimate he considers himself a cat person?
8. If a survey from the sample indicated the student completing the survey was female, what is your estimate she considers herself a cat person?
9. Do you think the responses to the question about animal preference is connected to gender? Explain.