

## Two-Way Tables: Classwork

Show your work. Round percents to the nearest tenth.

1. Leo asked 60 students whether they spend at least 30 minutes online each night. He recorded each student's gender and answer. There were 15 girls who go online and 5 that do not. There were 30 boys who go online and 10 that do not.

- a. Complete the two-way table by filling in the data from the survey.

		Gender		Frequency
		Girl	Boy	
Online	Yes			
	No			
Frequency				

- b. How can you check to make sure that all 60 students are included in the two-way table?
- c. What percent of the girls go online?
- d. What percent of the boys go online?
- e. Leo looked at the data in the table and said that boys are twice as likely to go online because  $30 \div 15 = 2$ . Explain Adam's error.

2. Bree surveyed 45 students to see if they get an allowance and if they are required to do chores at home. Of the 21 students who get an allowance, 16 do chores. Of the students who do not get an allowance, 15 do chores.

- a. Complete the two-way table by filling in the data from the survey.

		Allowance		Frequency
		Yes	No	
Chores	Yes			
	No			
Frequency				

- b. How can you check to make sure that all 45 students are included in the two-way table?
- c. What percent of students who get an allowance also do chores?
- d. What percent of students who do not get an allowance do not do chores?

NAME: \_\_\_\_\_

**3.** As each person entered a movie theater, Chase counted how many had popcorn and how many had a drink. Of the 113 people who had popcorn, 74 of them also had a drink. 18 people had neither popcorn nor a drink. There were a total of 150 people.

a. Complete the two-way table by filling in the data from the survey.

		Popcorn		Frequency
		Yes	No	
Drink	Yes			
	No			
Frequency				

c. About what percent of people with popcorn had a drink?

About what percent of people with a drink had popcorn?  
*(Tip: this is not the same question as above!)*

d. About what percent of people without popcorn did not have a drink?

About what percent of people without a drink did not have popcorn?

**4.** Mr. Davenport wants to find out if eighth graders select the same school lunch entrée as seventh graders. Of the 35 eighth graders surveyed, 17 selected pizza and 12 selected a burger. The number of eighth graders who selected spaghetti was the same as the number of seventh graders who selected spaghetti. For seventh graders, pizza was selected twice as many times as spaghetti. A total of 19 students selected a burger.

a. Complete the two-way table by filling in the data from the survey.

		Lunch			Frequency
		Pizza	Burger	Spaghetti	
Grade Level	8 <sup>th</sup>				
	7 <sup>th</sup>				
Frequency					

b. How many total students were surveyed?

c. What percent of 8<sup>th</sup> graders selected pizza?

What percent of pizza eaters were 8<sup>th</sup> graders?

d. What percent of 7<sup>th</sup> graders selected a burger?

What percent of burger eaters were 7<sup>th</sup> graders?

## Two-Way Tables: Homework

5. Adam surveyed students to see if they prefer Pepsi or Coke. There were 18 girls that prefer Pepsi and 12 girls that prefer Coke. There were 14 boys that prefer Pepsi and 21 boys that prefer Coke.
- a. Complete the two-way table by filling in the data from the survey.

		Gender		Frequency
		Girl	Boy	
Prefer	Pepsi			
	Coke			
Frequency				

- b. How many total students were surveyed?
- c. What percent of the girls prefer Coke?
- d. What percent of the boys prefer Pepsi?
6. A restaurant is keeping track of the meals that are being ordered. Of the 48 customers who ordered steak, 18 of them had a salad with it. Of the 30 customers who ordered fish, 12 had soup with it.
- a. Complete the two-way table by filling in the data from the survey.

		Meal		Frequency
		Steak	Fish	
Side	Soup			
	Salad			
Frequency				

- b. How many total customers were served?
- c. What percent of the steak meals included salad?
- d. What percent of the fish meals included salad?