

## UNIT 8

### Two-Way Frequency Tables Worksheet

Name: \_\_\_\_\_

1. Mr. Smith keeps track of his students' homework completion. He keeps track of how many boys and girls do not complete their homework. He puts students who don't complete their homework into two categories: first-time offenders and repeat offenders. He uses a table to keep track of the results.

	First-Time Offenders	Repeat Offenders	Total
Boys			
Girls			
Total			

- In one month 36 girls and 12 boys did not do their homework for the first time. 12 girls and 30 boys did not do their homework again. Put these figures in your table.
  - How many students did not complete all of their homework assignments this month?
  - What percentage of the students who did not complete their homework were boys who were First-Time Offenders?
  - Are boys or girls more likely to not complete their homework? Explain your reasoning.
2. Complete the two-way table for 9<sup>th</sup> Grader's school transportation survey:

	Male	Female	Total
Walk		46	
Car	28		45
Bus		12	27
Bike		17	69
Total	129	92	

- What percentage of 9<sup>th</sup> grade girls walk to school?
- What percentage of 9<sup>th</sup> graders are girls who walk to school?

3. Heather (a hairdresser) is making a record of all the customers she has had in the last month.

- a. Design and label a table that will show the number of male and female customers who are blond or brunette.

			Total
Total			

- b. In one month she has 40 blond females and only 5 blond males. Put these values in the table.

- c. How many blond customers does she have in total that month?

- d. She has 100 total customers and a total of 20 male customers during the same month. Use this information to finish filling in your table.

4. A large group of people was surveyed about their favorite movie genre. The participants had to give their age and choose their favorite genre from Action, Comedy, and Horror.

	Action	Comedy	Horror	Total
18-25 years old	238	450	312	1,000
25-49 years old	350	472	178	1,000
50+ years old	320	490	190	1,000
Total				

- a. A company that sells a product designed for young adults is looking to advertise before the movies of one of these genres. Which genre should they choose? Explain your reasoning.
- b. If you surveyed 12,000 people total, how many 18-25 year olds would you expect to choose Horror as their favorite genre?
- c. If you surveyed 24,000 people total, how many 25-49 year olds would you expect to choose Comedy as their favorite genre?