Additional Practice *(continued)*

Use the information in the table for exercises 3 and 4.

The table shows the results of a survey related to the musical preferences of all the students at a middle school.

	Country	Pop	Rock	Other
Sixth Grade	10	12	8	10
Seventh Grade	10	12	12	16
Eighth Grade	15	11	12	8

3. Classify each statement as true or false. Justify your answer.

a. Seventh graders are more likely to prefer pop music than eighth graders.

b. It is equally likely that someone who likes country music is in sixth grade as they are in seventh grade.

c. It is less likely that an eighth grader likes pop music than rock music.

d. It is equally likely that a sixth grader likes rock music as an eighth grader likes music that is not country, pop, or rock.

Additional Practice *(continued)*

The table shows the results of a survey related to the musical preferences of all the students at a middle school.

	Country	Pop	Rock	Other
Sixth Grade	10	12	8	10
Seventh Grade	10	12	12	16
Eighth Grade	15	11	12	8

4. Complete each table to show the percents represented by the different musical preferences. Round to the nearest whole percent if needed.

a. Percent of students in a **grade level** who like a type of music

	Country	Pop	Rock	Other
Sixth Grade	$\frac{10}{40} = 0.25 = 25\%$			
Seventh Grade				
Eighth Grade				

b. Percent of students who **like a type of music** that are in a certain grade

	Country	Pop	Rock	Other
Sixth Grade	$\frac{10}{35} \approx 0.29 = 29\%$			
Seventh Grade				
Eighth Grade				

c. Percent of **all** students surveyed

	Country	Pop	Rock	Other	Total
Sixth Grade					
Seventh Grade					
Eighth Grade					
Total					

Additional Practice *(continued)*

5. One day, an online store recorded the number of purchases made by customers in a given age range.

a. Complete the table.

Age Range	Music	Games	Total
Less than 18 years	62	64	
18 to 29 years	54	59	
30 to 50 years	45	51	
Older than 50 years	15	10	
Total			

b. Complete the table to display the number of customers in each age group who buy music or games.

Age Range	Music	Games	Total
Less than 30 years			
30 years or older			
Total			

c. Is it twice as likely that someone who purchased music is less than 30 years old? Explain.

d. For customers less than 30 years old, is it more likely that they will purchase music or purchase games? Explain.

e. For customers 30 years or older, is it more likely that they will purchase music or games? Explain.