Lesson 7: Classwork/Homework

1) Eighth grade students were asked whether they participate in an after-school activity. Complete the two-way frequency table below.

After-school Activity

		Yes	No	Total
Gender	Male		40	
	Female			95
	Total	102		187

2) Eighty students at Sagamore Middle school were surveyed whether they own an I-Pod. Half of the 50 eight graders said yes, and 28 of the seventh graders said yes. Complete the two-way frequency table.

	Yes	No	Total
7 th Grade			
8 th Grade			
Total			

3) The table shows the results of a survey about what the engineers said their favorite subject was in middle school.

	Math	Science	Total
Electrical	85	90	175
Chemical	80	91	171
Mechanical	89	81	170
Total	254	262	516

a) How many chemical engineers chose science?

b) How many engineers chose math?

- c) Overall, what was the favorite subject of all engineers?
- 4) A survey of students in a homeroom class explored the relationship between gender and participation in the school band.

	Boys	Girls	Total
In Band	4	8	12
Not in Band	9	5	14
Total	13	13	26

Which is a reasonable conclusion to draw from these data?

- A) The are more band members in the class than non-band members.
- B) There are more boys in the class than girls.
- C) Among the boys, there are more boys in the band than Not in the band.
- D) More than one-half of the band members in the class are girls.

5) A survey of randomly selected Sagamore students explored the relationship between gender and video game play. Which is not a reasonable interpretation of the data?

	Boys	Girls	Total
Play Daily	45	12	57
Do Not Play Daily	5	38	43
Total	50	50	100

- A) More boys surveyed play video game daily than girls.
- B) Ignoring gender, a little more than half of the students surveys play video games daily
- C) Of the boys surveyed, 5% do not play video games daily
- D) Of the girls surveyed, exactly 24% play video games daily
- 6) The following two-way table shows the number of students who voted for each of the two candidates for class president, by grade.

Candidate	Grade 7	Grade 8	Grade 9
Zoe	45	20	65
Alessandro	30	60	90
Total	75	80	155

How many more 8th graders voted for Alessandro than Zoe?

A) 15 B) 20 C) 40 D) 80

7) The following two-way table shows the number of different color cars and SUV's at an auto dealership.

Color	Car	SUV	Total
Red	25	15	40
White	15	10	25
Blue	40	20	60
Green	20	5	25
Total	100	50	150

What color is the least popular car in the dealership?				
A) White	B) Red	C) Green	D) Blue	

Review Work:

8) A farmer charges for his coffee beans using the equation C = 3.95p, where C is the cost of the coffee beans and p is the number of pounds of coffee beans. What is the slope?

9) Which best describes the association, if any, that is shown?

- A) positive association
- C) no association
- B) negative association
- D) non-linear association

