**A few random results for you to ponder…do the results justify the conclusions? Why or why not?  Pick THREE statements and give a MATHAMATICAL reason why the conclusions don't necessarily follow from the statement.**  
In the NFL, teams win more often when they score 13 points than when they score 14. Thus, scoring points is bad.  
  
Often when people use regression analysis to estimate the effect of police officers or police spending on crime, they find that cities with larger police forces/budgets have higher crime rates. Therefore, police cause crime.  
  
As ice cream sales increase, so to do drowning deaths. Thus, ice cream causes people to drown.  
  
Studies find that students who drink more tend to have lower grades. Therefore, drinking leads to poor student performance.  
  
Over the past 300 years, there has been a decrease in the number of pirates on the high seas, along with an increase in average global temperatures. Thus, the reduction in piracy has led to global warming.  
  
Did you know there is a health benefit to winning an Oscar? Doctors at Harvard Medical School say that a study of actors and actresses shows that winners live, on average, for four years more than losers. And winning directors live longer than non-winners.  
  
Children who come further down in the birth order have, on average, lower IQs than those born earlier in the birth order (e.g. First born children vs. 5th born children). Therefore birth order determines intelligence.