Responses to the TACTS 10.B.4 9/04/07.

#1-#5 are based on the graph

- B 1. Weakly supports is the best answer because the information in the graph does show a decline in deaths involving drinking and driving that COULD BE due to the new policy.
- E 2. The decline from 1961 to 1962 was from about 370 deaths to 310 deaths, far from 50%
- C 3. There is no information about the share of deaths.
- E 4. The decline from about 370 to about 310 is close to 60 so "strongly contradicts" is best.
- A 5. The weasel phrase "are consistent with" is such a weak statement that it can be strongly supported because it asserts so little.

#6-#9 are the Hadley Advertising items

- D 6. Weakly negatively relevant—popular opinion is not always wrong and the question is about their own motivation for buying a product
- Fig. 7. The item is Strongly negatively relevant because it correctly labels a serious flaw in the reasoning—the move from correlation to causation without ruling out other factors.
- E 8. Other data that tend to refute the hypothesis that Hadley Advertising is so effective must be considered Strongly negatively relevant.
- B 9. The other ad directors' presumably expert opinions merit consideration, but are not decisive, hence they are Weakly positively relevant

#10-#13 concern the logical structure in the passage about capital punishment

- B 10. The no deterrent effect assertion is argued for and in turn serves as a premise for the final conclusion that we should put an end to capital punishment
- C 11. The whole passage aims at convincing the reader that for several reason capital punishment should be abolished.
- B 12. That capital punishment is cruel and unusual gives another reason to abolish it ,and there is a bit of support offered for the assertion itself.
- D 13. This is not explicitly expressed, but seems plainly to be taken for granted by the rhetorical question about how can something deter.

- #14-#17 I like to call the Coming of Age in Samoa questions after Margaret Mead's most famous book
- E 14. If true, this data would refute the universal generalization asserted in the passage, so it is Strongly negatively relevant.
- A 15. This data, if true, removes the refuting instance, and thus it promotes acceptance of the original universal statement, thus it is Strongly positively relevant.
- C 16. Elephants and people, both long lived mammals that reproduce slowly, beyond that it is hard to see any real relevance. [Now if the animals in question were chimps or bonobos, would relevance be more arguable?]
- B 17. The universality of the theme may be based on real life experiences, so I think Weakly positively relevant is about right.
- #18-#21 the accounting firm questions
- C 18. The information shows that the firm could possibly be held accountable, but there are many steps in between that may never be taken.
- A 19. They "knowingly" did not report a questionable accounting practice, so the omission was intentional and could mislead shareholders.
- D 20. There really is no information in the passage about how long the two firms have had a relationship, so the information in the passage is Not Relevant.
- A 21. It seems like a textbook example of a violation of the principle of independence, since they "knowingly" did not report the questionable practice.

The remaining questions are all multiple choice questions

- B 22. Cost = \$240.00 since Gross profit = 40% of cost and selling price = \$336, which in turn = Gross profit plus cost.
- A 23. George has to take out a bank loan if <u>neither</u> party pays him. The chance of Fuzzy Logic <u>not</u> paying = 30% and the chance of Stalking Horse <u>not</u> paying is 40%. The chance of both not paying = 30% \times 40% = 12%
- B 24, $$4000 \times .03 = 120 and $$6000 \times .08 = 480 for the \$600 total earned.
- B 25. (3 hrs. x \$10) + (2 hrs x \$12) = \$54 (2 hrs x \$10) + (1 hr x 12) = \$32 so both equations are satisfied.
- C 26. This premise mean that V < A, and you already know that M < V, so M < A by transitivity.
- A 27, The argument is an example of Modus Tollens or Denying the Antecedent which is a deductively valid form so that if the premises are true, the conclusion MUST be true.
- C 28. This response is the contrapositive of the target statement. $(x)(Cx \rightarrow Bx) = (x)(-Bx \rightarrow -Cx)$
- A 29. If one of the preconditions for an explosion truly is the presence of a large quantity of grain, then an explosion should not happen if there is a small quantity of grain in the elevator.

- E 30. Responses A. C, and D are pretty plainly incorrect. The tempting response is B, in part because as a statement asserting a correlation it seems so weak. But here is a possible breakdown of the situation with a population of 1,000 students. In this population, 500 of them smoke, 900 have seen a movie in which the main character was a smoker, and about 450 of the 900 identify actors as role models. But of the 900 who saw a movie in which the main character was a smoker, ALL of the NONsmokers = 500 saw such movies, but only 400 of the smokers saw such a movie. At this point going to a movie with a smoker in it is negatively correlated with a student's status as a smoker. In any event, for B wouldn't you need time series data? Smoking increases among young people for several years and during that same period there are more cigarettes smoked on screen? So by a process of elimination, we get E, the "None of the above" response.
- B 31. Good old Karl Popper--falsifiability as the hallmark of science.
- E 32. Chez Chuck = 60%, CA = 70%, USA = 100% increased sake sales
- B 33. Of the 50 who did not see the ad, 18 did not buy the product so 18/50.
- D 34. Even if the two statements were true, it may be that while there is no overlap between persons and corporations, the set of legal creations might nonetheless contain both persons and corporations in two different sectors.
- C 35. Frank and Cindy are from Marketing and Randy and Edward are from Design, so they can all get along as far as we know. The other car holds the three people from Engineering and Kyle and Ann from Design, and so the problem is solved.