Math 102 Logic Project

Due Oct. 17th - 25 points

You are to type as much as possible, you may <u>neatly</u> write in connective symbols.

1) Find 5 articles or ads in newspapers, magazines, or on-line (at most 2 from the Web) for analysis that include the connectives described below. Attach the ads, articles, or photo copies of these and cite the source of each. *8 pts*

   a) Find one example of each of the five compound statements we have studied (negations, conjunctions, disjunctions, conditional, and bi-conditionals). When multiple connectives are involved the dominant connective is to be type of example the compound statement reflects.
   b) In the article, highlight or underline the sentence containing your chosen statements.
   c) Translate each of the compound statements into logic symbols after you define your simple statements.

2) Find an advertisement or commercial (not on the web) which demonstrates an argument (or implied argument). Cite the source of your ad and attach a copy of the ad or a typed script of the commercial (if audio). *7 pts*

   a) Identify the statements of the argument.
   b) Write the argument in logical form, in words and symbolically.
   c) Identify if this a valid or invalid argument by:
      i. Using a truth table to determine the validity,
         OR
      ii. Identifying which of standard forms of an argument/fallacy it correspond to.

3) On a separated sheet verify if the arguments below are valid or invalid. *5 pts/problem*

a) $t \rightarrow\ \sim p$

   $\sim t \rightarrow q$

   $\underline{\quad p \quad\quad\quad\quad\quad}$

   $\therefore q$

b) You can watch all of the baseball game or you can go out.

   If you have a test this Wednesday, then you cannot watch all the baseball game.

   You have a test this Wednesday.

   Therefore, you can go out.