

NAME _____ (Put all answers on these pages)

POLI 300

PROBLEM SET #12A

Due 12/3/10

TABLE PERCENTAGING

1. “*Education tends to undermine religious faith.*”

This sentence is drawn from Problem Set #3A, where you were asked to identify the two *variables* in the sentence. In Problem Set #9, you specified the *relationship* between the variables as follows:

(LEVEL OF EDUCATION) —————> (DEGREE OF RELIGIOSITY)

Moreover, in Problem Set #4, we considered how to *measure* these variables. Accordingly, this proposition can be researched using the SETUPS data, measuring LEVEL OF EDUCATION by V62 and taking V68 as a (not especially *valid*) *indicator* of (or *proxy* for) DEGREE OF RELIGIOSITY. Now you have learned how to analyze a relationship between two discrete variables: construct a crosstabulation of the two variables. The SPSS CROSSTABS is provided on an enclosed page. The table entries are case counts or *absolute frequencies*, and missing data is excluded.

Answer the following questions, *first* giving the answer as a ***fraction*** (i.e., cell entry divided by the appropriate total) and *then* (but only if you have a calculator) giving the answer as a ***percentage*** and, in any case, indicating whether the answer is a row, column, or total percentage.

- (a) What fraction/percent of college graduates attend every week?

_____ R% C% T%

- (b) Of all respondents who attend church every week, what fraction/percent are college graduates?

_____ R% C% T%

- (c) What fraction/percent of all respondents are college graduates who attend church every week?

_____ R% C% T%

- (d) What fraction/percent of all respondents are people who have never attended any college and who attend church only a few time a year or never?

_____ R% C% T%

- (e) Of all respondents who attend church every week, what fraction/percent have at least some college education?

_____ R% C% T%

- (f) Would you say that this data tends to *confirm or disconfirm* the original proposition, i.e., that more educated people tend to be less religious. Explain briefly.

2. The following questions refer to the enclosed SPSS crosstabulation of V2 (Presidential Vote) by V46 (Change in Financial Condition) in the 1992 SETUPS/NES data. Note that *non-voters* have been *excluded* from the table. Answer the following questions, *first* giving the answer as a ***fraction*** (i.e., cell entry divided by the appropriate total) and *then* giving the answer as a ***percentage*** (as calculated by SPSS).

- (a) What fraction/percent of Bush voters believe they are better off financially than a year ago?

- (b) What fraction/percent of Perot voters believe they are worse off financially than a year ago?

- (c) What fraction/percent of voters who believe they are worse off financially than a year ago voted for a candidate other than Bush?

- (d) What fraction/percent of the electorate voted for Bush?

- (e) What fraction/percent of voters who believe they are better off financially than a year ago voted for Bush?

- (f) What fraction/percent of the electorate believe they are better off financially than a year ago?

(g) What fraction/percent of the electorate is made up of voters who both believe they are worse off financially than a year and voted for a candidate other than Bush? _____

(h) Briefly discuss the relationship between these two variables.

3. Another enclosed SPSS table shows the relationship between PRESIDENTIAL VOTE and PARTY IDENTIFICATION for 1972 (Nixon vs. McGovern) respondents only in the SETUPS/NES72-92 data. The table is for voters only, i.e., non-voters have been excluded as missing data. Answer the following questions, first giving the answer as a *fraction* (i.e., cell entry divided by the appropriate total) and then giving the answer as a *percentage* (as calculated by SPSS).

(a) Of all Strong Democratic voters, what fraction/percent voted for McGovern? _____

(b) Of all voters, what fraction/percent were Independents? _____

(c) Of all voters, what fraction/percent voted for Nixon? _____

(d) Of all Independent voters, what fraction/percent voted for Nixon? _____

(e) What fraction/percent of McGovern's vote came from Independents? _____

(f) What fraction/percent of Nixon's vote came from (Strong or Weak) Democratic identifiers? _____

(g) What fraction/percent of the total vote was cast by (Democratic or Republican) party identifiers (i.e., non-Independents) voting consistently with their party identification? _____

(h) What fraction/percent of (Democratic and Republican) party identifiers (i.e., non-Independents) defected from their party identification in voting? _____

4. The following table (that displays case counts only) is based on the 1988 SETUPS/NES data. It was produced by a different statistical program called ABC, and *missing data (NA) has not been excluded*:

Row:	V124 (R'S OCCUPATION)						
Column:	V122 (EDUCATION)						
Freqs	NOT A	HS	SOME COLLE	NA			Total
	HS G	GRAD	COLLE GE GR				
MANAGERIAL:	14	58	98	245	3	418	
SALES/CLER:	38	158	162	75	11	444	
SKILLED MA:	87	142	44	10	6	289	
UNSKILLED:	134	147	54	13	6	354	
FARMER/FAR:	18	28	6	5	2	59	
NA:	78	77	34	20	2	211	
Total	369	610	398	368	30	1775	

Answer the following questions, *first* giving the answer as a ***fraction*** (i.e., cell entry divided by the appropriate total) and *then* (but only if you have a calculator) giving the answer as a ***percentage*** and, in any case, indicating whether the answer is a row, column, or total percentage. All answers should be in *adjusted relative frequencies*, i.e., *missing data (NA) should be excluded* from the calculations.

- (a) What fraction/percent of college graduates are in managerial jobs?
 _____ R% C% T%
- (b) Of all respondents who are in unskilled jobs, what fraction/percent have at least some college education?
 _____ R% C% T%
- (c) What fraction/percent of all respondents are college graduates in managerial jobs?
 _____ R% C% T%
- (d) What fraction/percent of all respondents are "white collar" (managerial plus sales/clerical) workers who are college graduates?
 _____ R% C% T%
- (e) Of all respondents who are "blue collar" (skilled and unskilled) manual workers, what fraction/percent are high school drop outs?
 _____ R% C% T%

5. The following table is also based on the 1988 SETUPS data and also was produced by ABC. Note that ABC, unlike SPSS, produces different “panels” of the table for each type of percentage (row, column, total). Answer the following questions, *first* giving the answer as a ***fraction*** (i.e., cell entry divided by the appropriate total) and *then* giving the answer as a ***percentage*** (as calculated by ABC). *Note.* The value (column) labels for the independent variable have been truncated. The categories are as follows:

Less than \$10K; \$10-15K; \$15-25K; \$25-35K; \$35-50K; More than \$50K.

Row: PARTYID2 (PARTY IDENTIFICATION)
 Column: V126 (FAMILY INCOME)

Row %	LESS THAN	\$10,000-\$15,000	\$15,000-\$25,000	\$25,000-\$35,000	\$35,000-\$50,000	MORE THAN	Total	N's
DEM:	22.0	15.0	18.8	15.8	17.3	11.1	100.0	773
IND:	19.1	14.8	17.9	20.4	13.6	14.2	100.0	162
REP:	12.4	11.0	19.9	16.8	17.0	22.8	100.0	683
Total	17.7	13.3	19.2	16.7	16.8	16.4	100.0	
N's	286	215	310	270	272	265		1618

Col %	LESS THAN	\$10,000-\$15,000	\$15,000-\$25,000	\$25,000-\$35,000	\$35,000-\$50,000	MORE THAN	Total	N's
DEM:	59.4	54.0	46.8	45.2	49.3	32.5	47.8	773
IND:	10.8	11.2	9.4	12.2	8.1	8.7	10.0	162
REP:	29.7	34.9	43.9	42.6	42.6	58.9	42.2	683
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
N's	286	215	310	270	272	265		1618

Tot %	LESS THAN	\$10,000-\$15,000	\$15,000-\$25,000	\$25,000-\$35,000	\$35,000-\$50,000	MORE THAN	Total	N's
DEM:	10.5	7.2	9.0	7.5	8.3	5.3	47.8	773
IND:	1.9	1.5	1.8	2.0	1.4	1.4	10.0	162
REP:	5.3	4.6	8.4	7.1	7.2	9.6	42.2	683
Total	17.7	13.3	19.2	16.7	16.8	16.4	100.0	
N's	286	215	310	270	272	265		1618

- (a) Of all Democrats, what fraction/percent have incomes of more than \$50,000? _____
- (b) Of all respondents with less than \$10,000 in income, what fraction percent are Republicans _____
- (c) Of all Republicans, what fraction/percent have less than \$25,000 in income? _____

- (d) Of all respondents, what fraction/percent are Republican with more than \$25,000 in income? _____
- (e) What fraction/percent of all respondents are Independents? _____
- (f) What fraction/percent of all respondents have income of more than \$50,000? _____
- (g) What fraction/percent of all respondents are Independents with incomes of more than \$50,000? _____
- (h) Of all respondents with \$15-25,000 in income, what fraction/percent are Independents? _____
- (i) Of all respondents with \$35-50,000 in income, what fraction percent are partisans (i.e., non-Independents)? _____
- (j) Of all respondents with more than \$35,000 in income, what fraction/percent are partisans (i.e., non-Independents)? _____
- (k) The 22.0% in the "northwest" cell of the first panel is the answer to what question?
- (l) The 59.4% in the "northwest" cell of the second panel is the answer to what question?

6. **VOTING BEHAVIOR BY IDEOLOGY IN 1976 ELECTION**

	<i>I D E O L O G Y</i>		
<u>Voted for:</u>	<u>Liberal</u>	<u>Moderate</u>	<u>Conservative</u>
Carter	75%	60%	33%
Ford	25%	40%	67%
	-----	-----	-----
	100%	100%	100%
	(n=200)	(n=500)	(n=300)

Source: hypothetical

- (a) What percent of liberal voters voted for Ford? _____
- (b) What percent of Carter voters were moderate? _____
- (c) What percent of Ford voters were conservative? _____
- (d) What percent of all voters voted for Carter? _____

7. **VOTING BEHAVIOR BY PARTY IDENTIFICATION**

	<i>P A R T Y I D E N T I C A T I O N</i>		
<u>Voting Behavior:</u>	<u>Democrat</u>	<u>Independent</u>	<u>Republican</u>
Democratic	60%	20%	5%
Republican	10%	30%	75%
Didn't Vote	30%	50%	20%
	-----	-----	-----
Total	100%	100%	100%
	(n=500)	(n=200)	(n=300)

Source: Hypothetical

Which party won the election (in this sample of $n = 1000$)? What *percent of the vote* did the winning party receive?