Excel assignment 2: Answer sheet

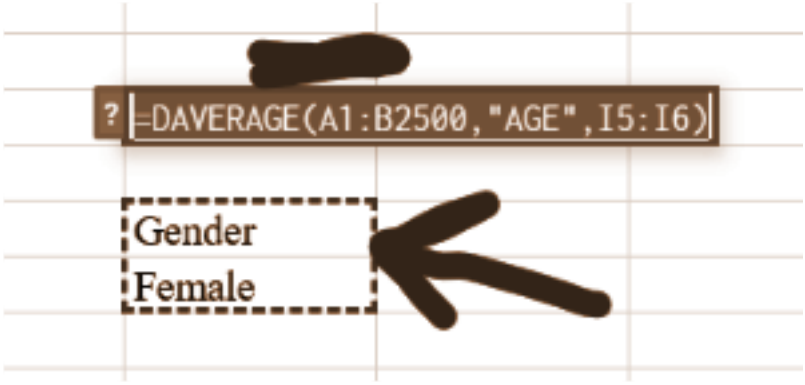
I. Part 1: Basic data

A. The number of "Young Independents" (20 and younger; live alone)

1. Formula: =COUNTIF(G2:G2500,"=Yes")
2. Result: 752

B. Mean age of all females

1. Formula: =DAVERAGE(A1:B2500,"AGE",I5:I6)
   a) Headings included when using this formula
   b) "I5:I6" is the criteria that I made a new cellset for:



2. Result:
   a) Decimal form: 22.1838565
   b) Rounding down: 22 (years old)

C. Median Income Wage of those who did not go to college

1. Steps used:
   a) Placed Education level and Income Wage columns adjacent
   b) Dialog option "Sort range" with Z-A (since High school) filing of Education Level column
   c) =MEDIAN(E2:E1312)
2. Result: 12800 (dollars)

D. The median Household Income of African American females. (Hint: you may want to create an intermediary column to calculate this)

1. Steps used:
   a) Placed Race column adjacent (before) Gender column. Household Income is also placed adjacent, after the Gender column
   b) Dialog option "Sort range" with A-Z filing of Race column, then A-Z filing of Gender column
   c) =MEDIAN(C2:C162)

2. Result: 13000 (dollars)

II. **Part 2:** "Next, please create a pivot table that grabs all the data. Put “Education Level” in values. Put the appropriate variable(s) in legend and axis to calculate the following: (Round to the nearest hundredth of a decimal if necessary)"

A. The number of males who only completed high school

1. Table:

A	B	C	D
COUNTA of Edu	Gender		
Education Level	Female	Male	Grand Total
College	614	574	1188
High School	501	810	1311
Grand Total	**1115**	**1384**	**2499**

2. Result: 810 males only completed high school

B. The number of Asian females who went to college

1. Table:

A	B	C	D	E
COUNTA of Education Level		Gender		
Race	Education Level	Female	Male	Grand Total
African Ame	College	86	62	148
	High School	75	90	165
African American Total		161	152	313
American In	College	22	24	46
	High School	38	55	93
American Indian Total		60	79	139
Asian	College	22	25	47
	High School	13	11	24
Asian Total		35	36	71
Other	College	53	44	97
	High School	53	70	123
Other Total		106	114	220
White	College	431	419	850
	High School	322	584	906
White Total		753	1003	1756
Grand Total		**1115**	**1384**	**2499**

2. Result: 53 Asian females went to college.

C. Of all American Indians, what percent only completed high school? (Hint: pretend there is a % sign after your number, e.g. enter 1/4 as 25.00, not as 0.25)

1. Table:

A	B	C	D
COUNTA of Edu	Education Level		
Race	College	High School	Grand Total
African America	148	165	313
American India	46	93	139
Asian	47	24	71
Other	97	123	220
White	850	906	1756
Grand Total	**1188**	**1311**	**2499**

2. Result:
    a) Out of 139 American Indians, 93 only completed high school.
    b) This percentage would be: 93/139 which is approximately 0.67 or 67% of American Indians.

D. Of all White males, what percent attended college? (Hint: pretend there is a % sign after your number, e.g. enter 1/4 as 25.00, not as 0.25)

1. Table:

A	B	C	D	F
COUNTA of Edu	cation Level	Education Level		
Race	Gender	College	High School	Grand Total
⊟ African Ame	Female	86	75	161
	Male	62	90	152
African American Total		148	165	313
⊟ American In	Female	22	38	60
	Male	24	55	79
American Indian Total		46	93	139
⊟ Asian	Female	22	13	35
	Male	25	11	36
Asian Total		47	24	71
⊟ Other	Female	53	53	106
	Male	44	70	114
Other Total		97	123	220
⊟ White	Female	431	322	753
	Male	419	584	1003
White Total		850	906	1756
Grand Total		**1188**	**1311**	**2499**

2. Result:
    a) Out of 1003 White males, 419 completed college.
    b) This percentage would be: 419/1003 which is approximately 0.42 or 42% of White males.

III. **Part 3**: "In our sample, females are more likely to be college students than males. Is this observation consistent within all the races in our sample? Pick ALL races for which females are more likely to be college students."
(Options given: African American, American Indian, Asian, White, Other)

A. Observation consistent?
   1. No, for these races:
      a) American Indian
      b) Asian
   2. Yes, for these races:
      a) African American
      b) Other
      c) White

B. Races whose females are more likely to be college students: see #2 of previous Section A.
   Reference table below:

A	B	C	D	E
COUNTA of Education Level		*Gender*		
Race	*Education Level*	Female	Male	Grand Total
African Ame	College	86	62	148
	High School	75	90	165
African American Total		161	152	313
American In	College	22	24	46
	High School	38	55	93
American Indian Total		60	79	139
Asian	College	22	25	47
	High School	13	11	24
Asian Total		35	36	71
Other	College	53	44	97
	High School	53	70	123
Other Total		106	114	220
White	College	431	419	850
	High School	322	584	906
White Total		753	1003	1756
Grand Total		**1115**	**1384**	**2499**

IV. **Part 4**: "Create a pivot CHART to show your answer to the previous question graphically. Use the provided upload box to submit your pivot chart—you should be able to upload a screenshot, the Excel file, print it to a PDF, whatever works for you. (Hint: Your pivot chart should be a bar graph comparing the percentage of college students in each gender by race)"

A. Steps used:

1. Reference table from Part 3
2. Create bar graph
    a) Select "stacked" form for easier comparison (also less cramped)
    b) Remove "grand total" data for more viewing space

B. Graph: