The effect of race on income

income = thousands of dollars per year
educ = (higher numbers = more education)
jobexp = number of years experience at current job
race = ethnicity

income	educ	jobexp	race
5	2	9	black
9.7	4	18	black
28.4	8	21	black
8.8	8	12	black
21	8	14	black
26.6	10	16	black
25.4	12	16	black
23.1	12	9	black
22.5	12	18	black
19.5	12	5	black
21.7	12	7	white
24.8	13	9	white
30.1	14	12	white
24.8	14	17	white
28.5	15	19	white
26	15	6	white
38.9	16	17	white
22.1	16	1	white
33.1	17	10	white
48.3	21	17	white

1. Calculate the mean and standard deviation of each variable separately for white employees and black employees. Create a visual display of the data. Determine if the data approximate a normal distribution. Determine if the variances in income for white and black employees are approximately equal.

2. Run a one-way ANOVA (or independent samples t-test) to determine if white employees earn more than black employees.

3. Run a multiple regression analysis to determine which variables predict income. Try a hierarchical model with education entered first, job experience second, and race third. Test the additional contribution of each variable. Write out the best model.

4. Try a stepwise regression analysis. Write out the final model below.

5. Does race impact income?