

King	20	27	27	20	20	24	20	23	20	22	20	20	20
	20	20	10	24	20	21	25	23	20	22	20	20	
Menthol	16	13	16	9	14	13	12	14	14	13	13	16	13
	13	18	9	19	2	13	14	14	15	16	6	8	
One Hundred	5	16	17	13	13	14	15	15	15	9	13	13	13
	15	2	15	15	13	14	15	16	15	7	17	15	

4. Smoking, Body Temperature, Gender The table below lists body temperatures obtained from randomly selected subjects (based on Data Set 3 in Appendix B). The temperatures are categorized according to gender and whether the subject smokes. Using a 0.05 significance level, test for an interaction between gender and smoking, test for an effect from gender, and test for an effect from smoking. What do you conclude?

	Smokes				Does Not Smoke			
Male	98.4	98.4	99.4	98.6	98.0	98.0	98.8	97.0
Female	98.8	98.0	98.7	98.4	97.7	98.0	98.2	99.1

Cumulative Review Exercises

Please be aware that some of the following problems may require knowledge of concepts presented in previous chapters.

In Exercises 1–5, refer to the following list of numbers of years that U.S. presidents, popes, and British monarchs lived after their inauguration, election, or coronation, respectively. (As of this writing, the last president is Gerald Ford, the last pope is John Paul II, and the last British monarch is George VI.) Assume that the data are samples randomly selected from larger populations.

Presidents	10	29	26	28	15	23	17	25	0	20	4	1	24	16	12
	4	10	17	16	0	7	24	12	4	18	21	11	2	9	36
	12	28	3	16	9	25	23	32							
Popes	2	9	21	3	6	10	18	11	6	25	23	6	2	15	32
	25	11	8	17	19	5	15	0	26						
Monarchs	17	6	13	12	13	33	59	10	7	63	9	25	36	15	

1. Descriptive Statistics Include appropriate units in all answers.

- Find the mean for each of the three groups.
- Find the standard deviation for each of the three groups.
- Find the variance for each of the three groups.
- What is the level of measurement of the data (nominal, ordinal, interval, ratio)?