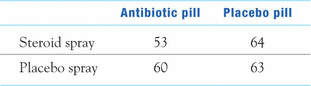
**[9.34 Marijuana and work](javascript:top.OpenSupp('exercise','9',34))**. How does smoking marijuana affect willingness to work? Canadian researchers persuaded young adult men who used marijuana to live for 98 days in a “planned environment.” The men earned money by weaving belts. They used their earnings to pay for meals and other consumption and could keep any money left over. One group smoked two potent marijuana cigarettes every evening. The other group smoked two weak marijuana cigarettes. All subjects could buy more cigarettes but were given strong or weak cigarettes depending on their group. Did the weak and strong groups differ in work output and earnings?[**19**](JavaScript:top.ShowFootnote('9_19'))

|  |  |
| --- | --- |
| (a) | Outline the design of this experiment: |
| (b) | Here are the names of the 30 subjects. Use software or [**Table B**](http://ebooks.bfwpub.com/bps6e/frontmatter/bps6e_tables.pdf) at line 120 to carry out the randomization your design requires.  http://ebooks.bfwpub.com/bps6e/tables/9_T_UN_3.gif  Table B 120-132:  Group 1:  16 04 26 21 19 29 07 22 10 25 13 15 05 09 08  Mattos, Bower, Williams, Sawant, Reichert, Zaccai, DeVorce, Scanell…  Group 2:  27 23 30 28 18 03 01 12 14 17 11 06 24 20 02  Wilson, Sheldon, Zelaski, Worbis, Newlen, Birkel, Abel, Heaton, Lamone, Molnar, Glosup… |
| (c) | Do you think this can be run as a [double–blind experiment](JavaScript:top.Define('doubleblindexperiment'))? Explain.  Yes, because it would be possible to measure the outcome of both groups without knowing which of the two was smoking the strong cigarettes. In order to run a double –blind experiment, neither the experimenters nor the participants can know which treatment is received by which subjects. |

[**9.38 Experimental design**](javascript:top.OpenSupp('exercise','9',38)). The clinical trial was a completely randomized experiment that assigned 240 patients at random among four treatments as follows:



|  |  |
| --- | --- |
| (a) | Outline the design of the experiment. |
| (b) | How will you label the 240 subjects?  By assigning each subject a 3 digit number between 001 and 240. |
| (c) | Explain briefly how you would do the random assignment of patients to treatments. Assign the first 5 patients who will receive the first treatment.  I would a) use a statistical software program such as minitab to randomize the list of patients and then assign a group of equal or nearly equal size to each treatment.  The first 5 patients who will receive the first treatment: Patients 114, 189, 52, 99, 204    Or b) select one person at random of the first 4 and then every 4th individual after that until I had sufficient participants for each group. |