Preparation sheet for Test 2

Problems on this Test will be based on the homework problems listed below.

Note 1: The notation, e.g., 2.1.3, means 'Problem 3 of Sec. 2.1'.
Note 2: You should check the original homework assignment for hints, notes, or answers for any of the problems listed with an asterisk (e.g., 2.1.3*).
Note 3: A problem on the Test may combine concepts of more than one problem listed on this sheet, or it may use only part of the solution of a given homework problem.
Note 4: Problems within one HW assignment, but pertaining to different topics, are separated by a semi-colon and a larger space.

When preparing for the Test, it will be beneficial for your performance if you **redo** the problems listed below, and also review the related examples in the notes and in the book. Please **note**: It will **not be helpful** if you simply browse those problems **without actually doing them**.

If you can do a problem but are not confident that you can do it fast (as will be expected on the Test), you should redo it multiple times (taking breaks in between) until you *can* do it fast and with confidence. This is the same concept as that of doing multiple repetitions of a physical exercise to make your muscles master and remember it.

On this Test, use of a calculator will **not** be allowed.
You may prepare and use one double-sided sheet with formulae. There, you may write *anything* that you think may be useful to you on the Test: formulae, solutions of examples, pictures, etc. However, make sure that those things are related to this Preparation sheet. That is, do *not* put there formulas "just in case": if they were not needed when you worked on this Preparation sheet, then they will not be needed on the Test.

1. **HW 14**: ## 3.5.{ 7*, 9*, 11*};   3.5.{3*, 23, 24*, 25, 26*, 27*, 28*, 29*}.

2. **HW 15**: # 3.6.8(a–c*).

3. **HW 16**: ## 3.7.{13, 14*, 15}.

4. **HW 17**: # 3.8.{1, 5, 12*, 17*}. What is the method used in this HW/Lecture called?

5. **HW 18**: # 3.9.{5, 7}. What is the method used in this HW/Lecture called?
   Make sure to put the general formula on your formula sheet.

6. **HW 19**: # 3.10.{4*, 6*}.