

Name:

ASTRONOMY 1102 - Section 1

Instructor: Juhan Frank

Fall 1999

Homework # 3 due Mon. Sep. 27

Radiation, More Spectra and Doppler Effect

1) You may use your calculator, wherever necessary, to do the following problems from the end of chapter 7, on page 179:

Problem 8 (done in class, but I suggest you try again on your own and write down your answers so that you can review this before the next test).

Problem 9 (You may use calculators)

Problem 11 (Some calculation, mostly thinking...)

2) A spectral line with rest wavelength of 400nm is detected in a quasar as an emission line at a wavelength of 500nm. What is the speed of recession of this galaxy (approximately-NO CALCULATOR NEEDED).

3) What kind of spectrum do you see along the directions shown on the diagram?

THIS LOOKS A BIT LIKE
THE STAR FORMATION REGION
IN ORION.

