

Problems for Test 3 in Modern Physics 2:

These are all from your book or the online Ch. 16 Chapter on Cosmology:

Chapter 14:

52 Part (a) is pretty extreme, but part (b) is a possible very heavy radiation dose.

59 (Involves shockwaves, answers are in back, but give a solution with explanations of the steps.)

Chapter 15:

8 (neutrinos in decays)

12 (conservation laws for particles)

Chapter 16 (PDF online, see class website or textbook website)

6 (Hubble's law)

9 (Temperature for transparency of the early univers)

10 (Background radiation)