

# Black Holes, Problem Set 4 for Thursday, Sept. 12

Read and be prepared to discuss *Spacetime Physics* to p. 77 (the end of Chapter 3).

You can now do an amazing variety of special relativity problems. I have chosen two of the end-of-Chapter-3 problems you to savor.

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## Problem 1 — Red-Shift in the Expanding Universe

Do Problem 3-10 on p. 82.

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## Problem 2 — Relativistic Addition of Velocities

Do Problem 3-11 on pp. 82-84. THIS PROBLEM HAS A LOT OF PARTS.