

Mathematics 414, Problem Set #8
(due by 1:00, November 3)

The problems below are all closely connected to the 2009–2010 Workshop Problems. Any problem that you produce should be ready for me to type. In particular, I am unable to type incomplete sentences. The wording, and choice of numbers, should be very carefully considered. Ideally, solutions should also be carefully written up, though with solutions I am more interested in content. All references are to Workshop Problems, 2009–2010.

Problem 1. Write up a solution of Problem 6 OR Problem 14 of Grade 11–12, improving on the solution sketch provided.

Problem 2. Write up a solution of Problem 13 OR Problem 18 of Grade 8–10, improving on the solution sketch provided..

Problem 3. Discuss in some detail a 2009–2010 workshop problem *different* from the two problems you chose to deal with in answering the first two questions of this assignment.

Problem 4. Make up and solve a 6/7 workshop problem which attempts to do what Problem 1 of Grade 6–7 so successfully does, which is to lead to a wrong answer unless one draws a picture. The problem should be very accessible if a diagram is drawn.

Problem 5. Make up and solve a workshop problem that involves the same mathematical ideas as Problem 10 or 11 of Grade 6–7, or Problem 8 or 12 of Grade 11–12. Avoid merely cloning one of these problems.