

Mathematics 308 — Geometry

Third homework — due Wednesday, October 8

Exercise 1. (a) Finish the procedure `mkline`, and include examples of how to use it. (b) Modify your examples to restrict drawing to a square of sides 4'' in the centre of the page. (c) Modify your procedure so that it doesn't depend on a particular choice of page dimensions, but uses PostScript to figure out what they are. Include examples.

Exercise 2. Use Bezier curves to graph the function $y = \cos(x - \pi/6)$ for $x = -\pi$ to π . Put your graph in a box $3'' \times 6.5''$. Your graph should be accurate to within $0.01''$. Use loops to include a coordinate grid in grey or some pastel colour.