

Homework 3

1. Midterm 2013 Q5

Optimise the function
subject to the constraint

$$f(x, y) = x^2y - 2xy^2 + 3xy + 4$$
$$y = 1 \quad \text{and} \quad y + 4x \leq 1.$$

2. Midterm 2013 Q6

Optimise the function
subject to the constraint

$$f(x, y) = x^2y - 2xy^2 + 3xy + 4$$
$$y \geq 1 \quad \text{and} \quad x \geq -2.$$