$$(x, y) \mapsto (x^2 + y - 11)^2 + (x + y^2 - 7)^2$$

with gradient:

$$(x, y) \mapsto \begin{pmatrix} 4x(x^2 + y - 11) + 2(x + y^2 - 7) \\ 2(x^2 + y - 11) + 4y(x + y^2 - 7) \end{pmatrix}$$