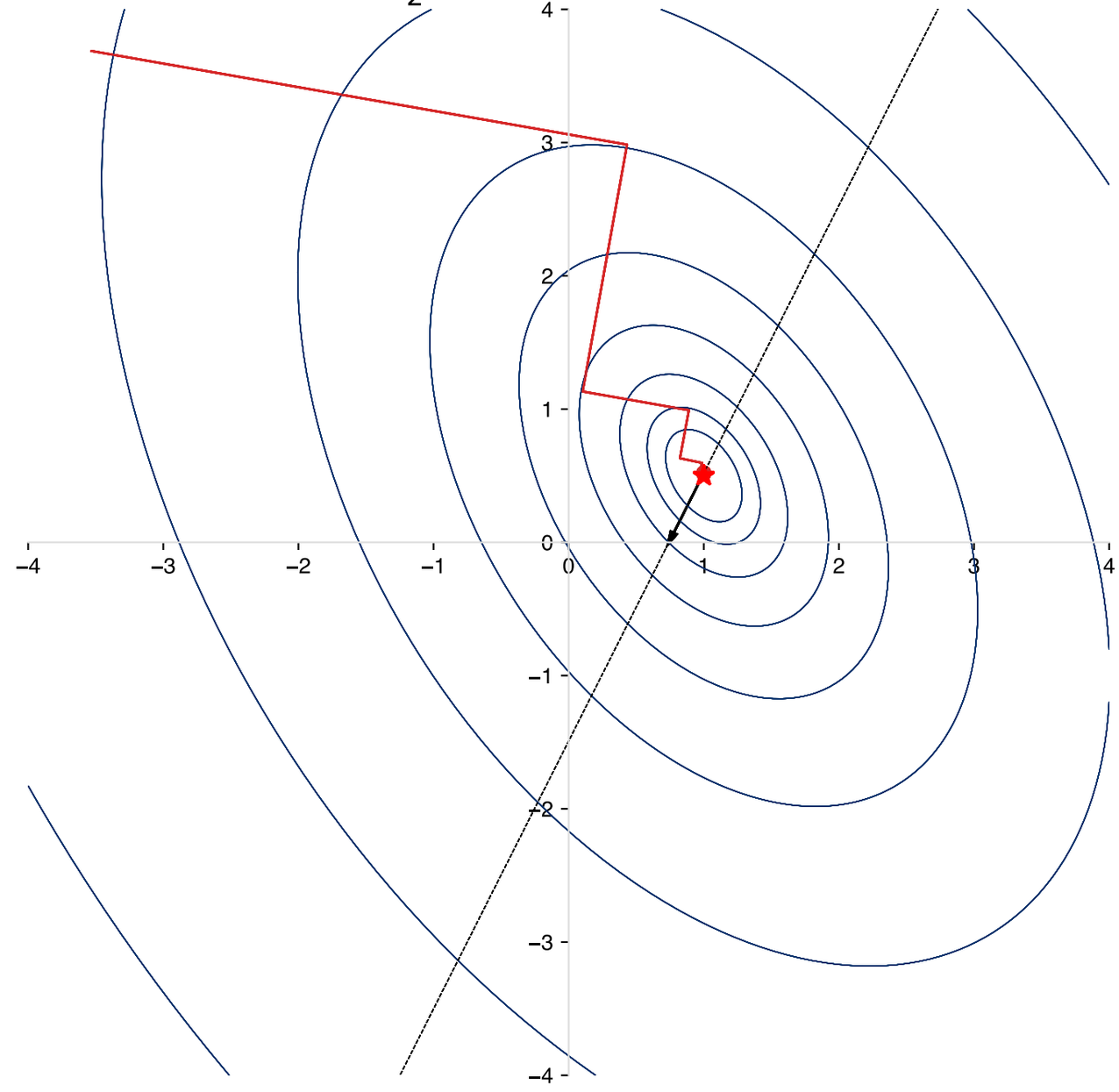
$$f(\mathbf{x}) = \frac{1}{2}(\mathbf{x} - \mathbf{x}^*)^\top \mathbf{Q}(\mathbf{x} - -\mathbf{x}^*)$$



Use the right arrow key to iterate.
Use 0-2 to select function $f(\mathbf{x})$.
Use the left mouse click to select a location.
Use 'r' to reset search.

Gradient Descent: Backtracking

Iteration $k = 3099$

Step size $\alpha_{3099} = 0.413$

$\mathbf{x}^\star = [1.000\ 0.500]^\top$

$\mathbf{x}_{3099} = [1.000\ 0.519]^\top$

$f(\mathbf{x}_{3099}) = 0.000$

$$\|\mathbf{x}^\star - \mathbf{x}_k\|_2$$