366 Programming Assignment2
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Since the graph of 20 examples are different from each other, and the appearances are randomly distributed because the step size 20 is too small to learn the general function approximation. In the graph of 20 examples, there are 6 peaks, 2 of them are very sharp, and 4 valleys, 2 of the valleys are sharp as well, the width of the peaks and valleys are approximately 1.

Because we have the target function includes sin(x-3)*cos(y), as well now, the upper bound for sin and cos functions are 1 and the lower bound are -1. So the plot s in both x and y directions will have radio-wave appearances, the height of the peak would be approximately to 1+N(0,0.1) and the height of valley would be approximately to -1+N(0,0.1)

Instead of tiling the input space into an 11*11 grid of squares, we divided into an 11*21 grid of rectangles the size of each tiling will be smaller, and become denser. The denser the tiling, the finer and more accurately the desired function can be approximated, but the greater the computational costs.