

The Problem of the Month
April 2022

Let $f(x, y) = \sqrt{(x-1)^2 + (y+1)^2} + \sqrt{(x+1)^2 + (y-1)^2} + \sqrt{(x-2)^2 + (y-2)^2}$.

Find the minimum value of $f(x, y)$ over the real numbers. Give your answer in the form $a\sqrt{b} + \sqrt{c}$, where a, b and c are positive integers.

