The equation of the plane passing through the point \((1, 2, 3)\) and parallel to the plane \(2x - y + 3z = 4\) is:

\[
2(x - 1) - y + 3(z - 3) = 0
\]

Find the unit vector parallel to the normal vector of \(P\) and \(Q\) plane.

(a) Determine if planes \(P\) and \(Q\) are parallel, orthogonal.

(b) Write down your full name and student ID.
(b) Sketch and shade the region in the first quadrant bounded by the level curve in part (a) and

\[ f(x, y) = x + y \]

(c) Find an equation for the level curve of \( f(x, y) = 3 \) through the point (1, 2).