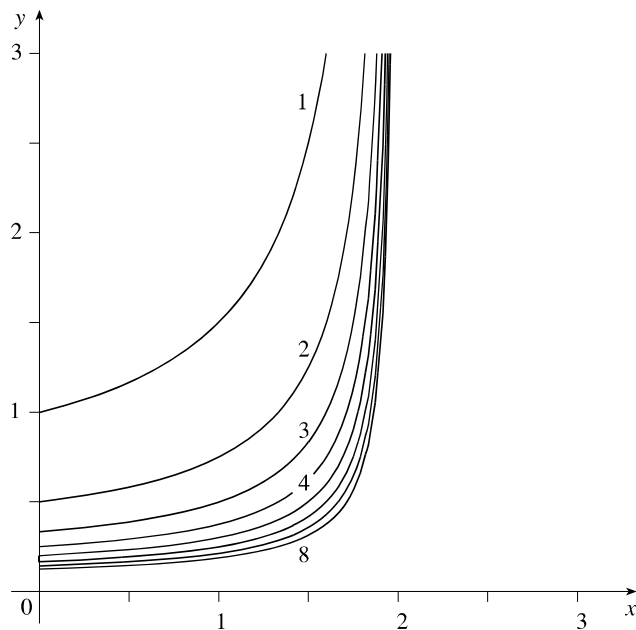


GROUP WORK 3, SECTION 14.3

Mixed Partial

The level curves of a function $z = f(x, y)$ are given below.



Use the level curves of the function to decide the signs (positive, negative, or zero) of the derivatives f_x , f_y , f_{xx} , f_{yy} , f_{xy} , and f_{yx} of the function at the point $\left(\frac{3}{2}, \frac{1}{2}\right)$.