Solution

$$\mu_{1,0} = \sum_x \sum_y (x-\bar{x})^1 (y-\bar{y})^0 f(x,y)$$

$$= \sum_x \sum_y (x-\bar{x}) f(x,y)$$

$$= \underbrace{\sum_x \sum_y x\, f(x,y)}_{m_{1,0}} - \sum_x \sum_y \bar{x}\, f(x,y)$$

$$= m_{1,0} - \underbrace{\bar{x}}_{m_{1,0}/m_{0,0}} \underbrace{\sum_x \sum_y f(x,y)}_{m_{0,0}}$$

$$= m_{1,0} - \frac{m_{1,0}}{m_{0,0}} m_{0,0} = 0$$