$$\left[-k\cdot\frac{\partial\theta}{\partial x}\cdot dy+\rho\cdot c\cdot v\left(\theta+\frac{1}{2}\frac{\partial\theta}{\partial y}\cdot dy\right)\cdot dy+\left\{-k\cdot\frac{\partial\theta}{\partial y}\cdot dx\right\}\right]-\left[-k\cdot\frac{\partial}{\partial x}\left(\theta+\frac{\partial\theta}{\partial x}\cdot dx\right)\cdot dy+\rho\cdot c\cdot v\left(\theta+\frac{\partial\theta}{\partial x}\cdot dx+\frac{1}{2}\cdot\frac{\partial\theta}{\partial y}\cdot dy\right)\cdot dy+\left\{-k\cdot\frac{\partial}{\partial y}\left(\theta+\frac{\partial\theta}{\partial y}\cdot dy\right)\cdot dx\right\}\right]$$

$$= -k\cdot\frac{\partial\theta}{\partial x}\cdot dy+\rho\cdot c\cdot v\cdot\theta\cdot dy+\frac{\rho\cdot c\cdot v}{2}\cdot\frac{\partial\theta}{\partial y}\cdot dy\cdot dy-k\cdot\frac{\partial\theta}{\partial x}\cdot dx+k\cdot\frac{\partial\theta}{\partial x}\cdot dy+k\frac{\partial^2\theta}{\partial x^2}\cdot dx\cdot dy$$

$$-\rho\cdot c\cdot v\cdot\theta\cdot dy-\rho\cdot c\cdot v\cdot\frac{\partial\theta}{\partial x}\cdot dx\cdot dy-\rho\cdot c\cdot v\cdot\frac{1}{2}\cdot\frac{\partial\theta}{\partial y}\cdot dy\cdot dy+k\cdot\frac{\partial\theta}{\partial y}\cdot dx+k\cdot\frac{\partial^2\theta}{\partial y^2}\cdot dx\cdot dy=0$$

$$k\cdot\frac{\partial^2\theta}{\partial y^2}\cdot dy\cdot dx+k\cdot\frac{\partial^2\theta}{\partial x^2}\cdot dx\cdot dy-\rho\cdot c\cdot v\cdot\frac{\partial\theta}{\partial x}\cdot dx\cdot dy=0$$