Figure 1: Figures for the first and second examples. In the first set, the curl is proportional to the angular velocity. In the second set, the curl is zero. In the third example, the "paddlewheel" would spin because there is not an equal force on both sides.

The Divergence

Later we will formally connect the idea, but for now we can say that intuitively, the divergence will be a number (computed at a point in the vector field) that will tell us what the "net flow" of the vector field is if we had a small permeable box there.
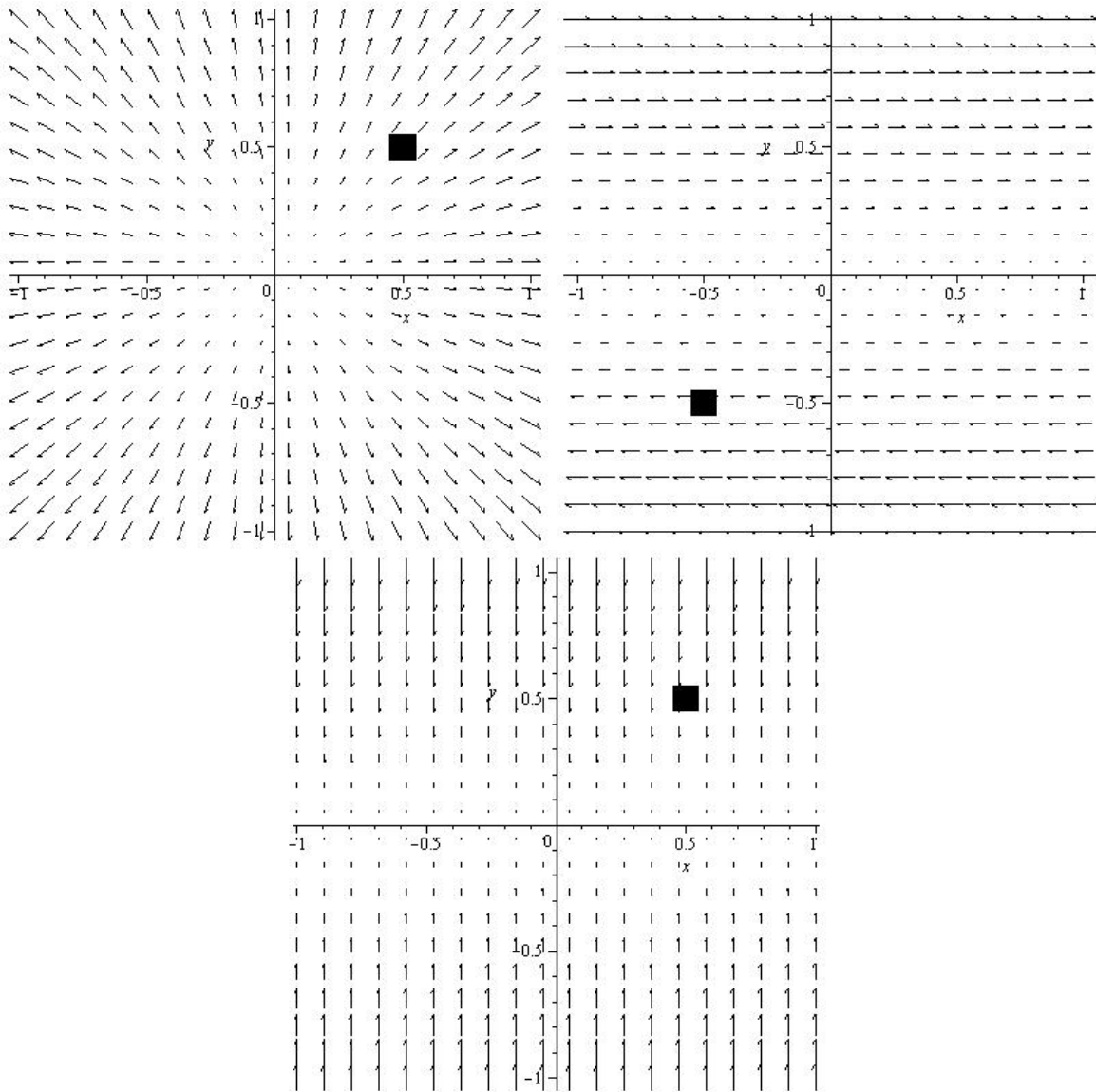

Figure 2: Divergence is the net flow of the "fluid" through a small box in the flow. Do these represent positive, negative or zero divergence?