|  |  |  |  |
| --- | --- | --- | --- |
| Math216, HW8 |  |  | Section:21/22/23/24 |
| Name: |  | UMID: |  |

**Question 1: make sure to box or otherwise emphasize your** final answer**.**

Q1 – continued (if necessary. If not, please keep this page in the PDF to avoid submission problems with gradescope)

**Question 2: make sure to box or otherwise emphasize your** final answer**.**

**Question 3: Fill the entries in the following table with CONVERGE TO (0,0) or CONVERGE TO INFINITY or NEITHER.**

|  |  |  |
| --- | --- | --- |
|  | **Initial condition y(0)=(0,0)** | **Initial condition y(0)≠(0,0)** |
| **a=-1** |  |  |
| **a=0** |  |  |
| **a=1** |  |  |

**Sketch direction fields, show your work:**