Name: _____ Teammates:

Lotka-Volterra consumer-resource dynamics

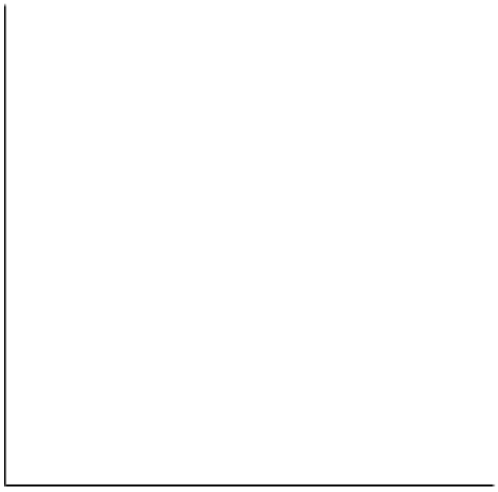
Consider a systems with the following parameters:

- Resource growth rate ***r* = 0.5**
- Consumer attack rate ***a* = 0.1**
- Consumer conversion efficiency ***e* = 0.2**
- Consumer maintenance cost ***m* = 0.3**

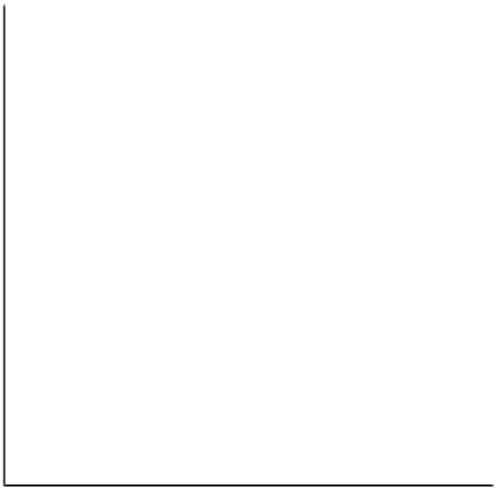
Draw the isoclines for this system on the following state-space graphs.

1. Please ensure you *label all axes*
2. If you do any calculations, show your work. (Feel free to use the back of this sheet)
3. Add growth vectors (arrows) to parts of your state-space depending on the placement of isoclines

Resource isocline



Consumer isocline



Combined isoclines