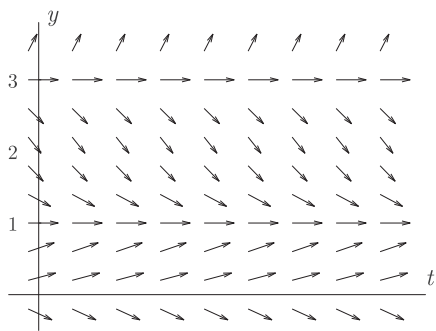
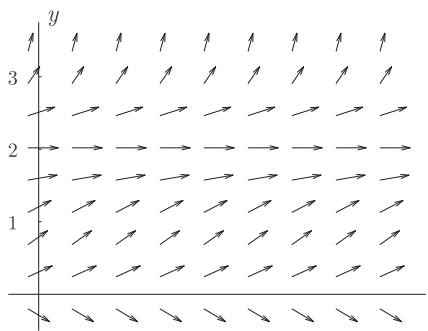


Graphics for Problems in Section 3.1.

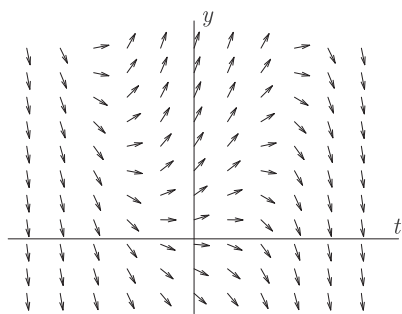
2.



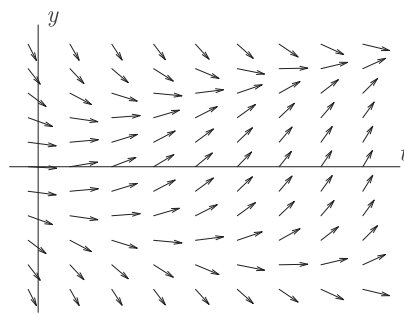
3.



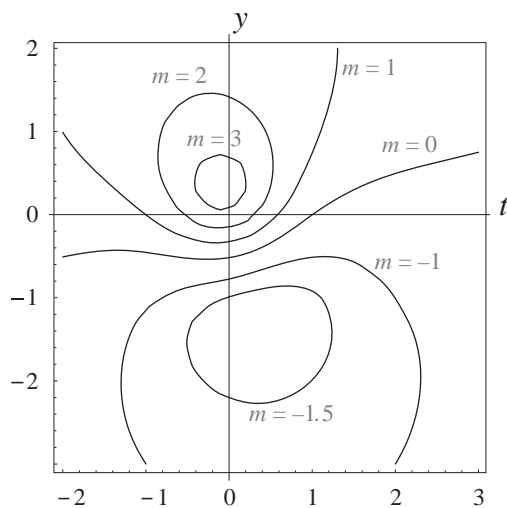
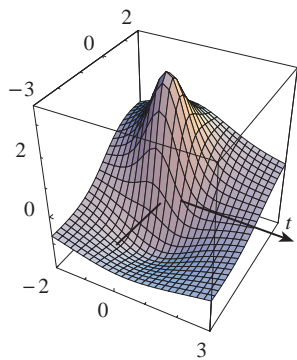
4.



5.



10.



Bonus problems!

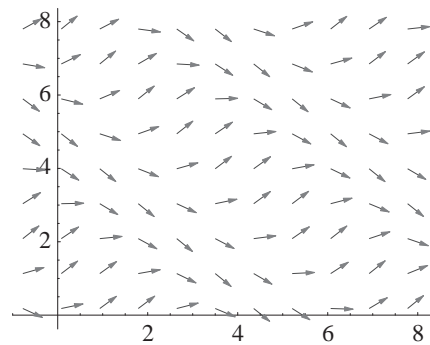
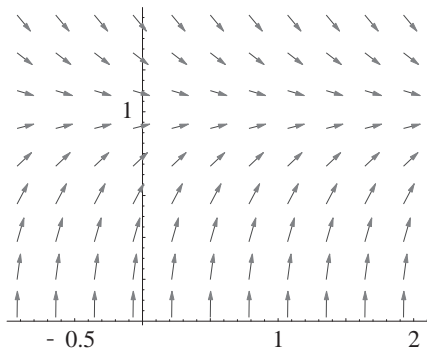
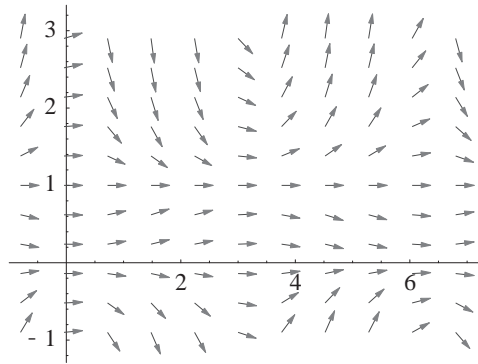
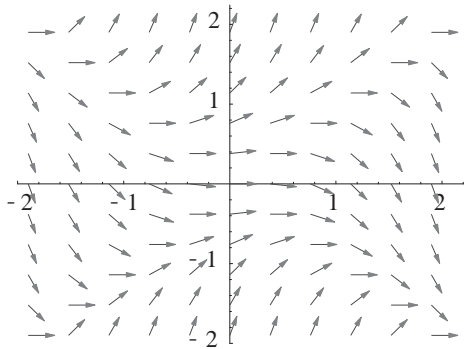
For each of the four equations on the right find the corresponding direction field from those shown below. Also sketch several solution curves over the direction field.

$$y' = -y + 1/y$$

$$y' = \sin(t + y)$$

$$y' = \sin(t) y (1 - y)$$

$$y' = y^2 - t^2$$



Below you see the graph of $f(t, y)$ and to the right a corresponding plot of several contours (i.e., level curves). Use the contours to make a rough sketch of the direction field of the equation $y' = f(t, y)$, and sketch the solution curve through each of the indicated points on the y-axis.

