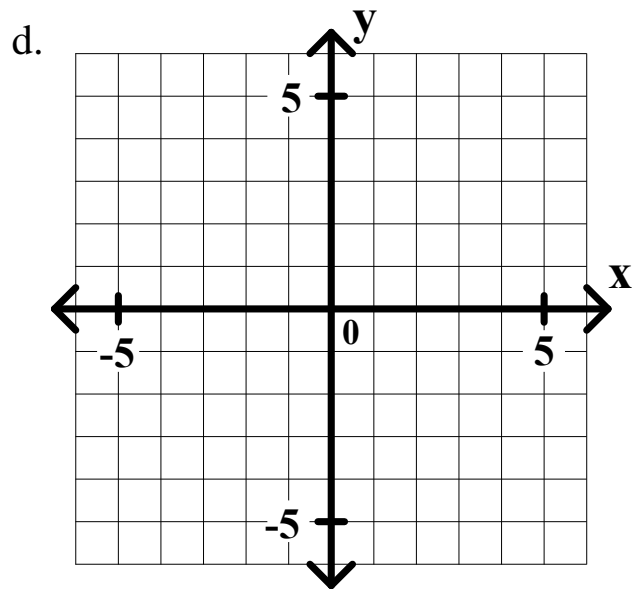
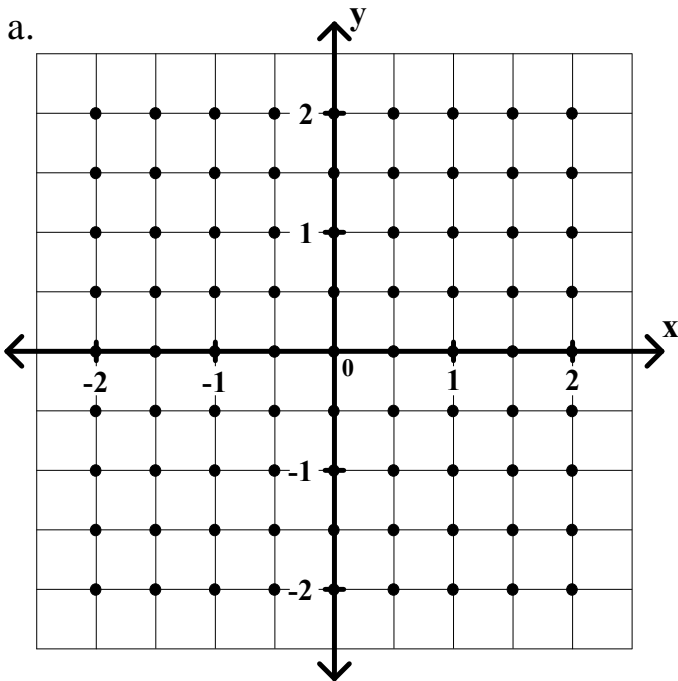


In the following problem, you are given a differential equation and a point. Do each of the following. Show your work in the space provided.

- Sketch a slope field on the axes provided at the indicated points.
- Find the general solution of the differential equation.
- Find the specific solution that would contain the given point.
- Graph the specific solution.

1. $\frac{dy}{dx} = -\frac{x}{y}$; (-2, 1.5)



b. _____

c. _____

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Find the general solution of each of the following differential equations. Then find the specific solution that would contain the given point.

2. $dy/dx = xy^2$; (1, 2)

3. $ydy - xdx = 0$; (5, 4)

4. $dy = x\sqrt{y} dx$; (2, 9)

5. $dy/dx = 0.03y$; (0, 600)