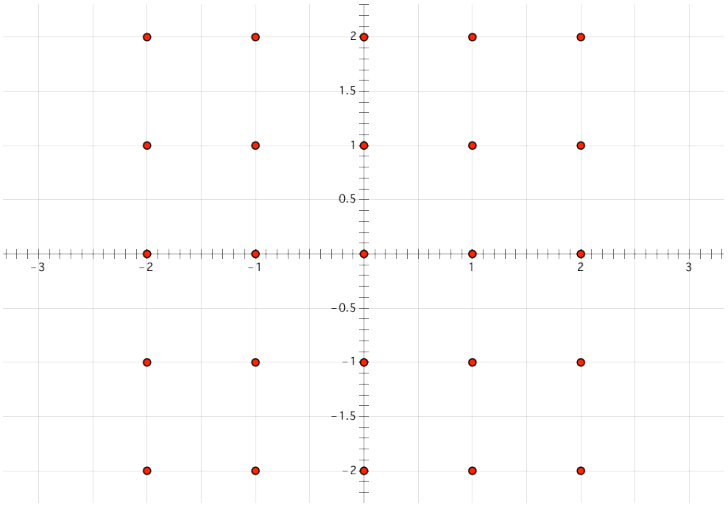
Worksheet Assignment 6.3 _____

a) Given the differential equation $y' = 3x$, sketch the slope field on the grid below.

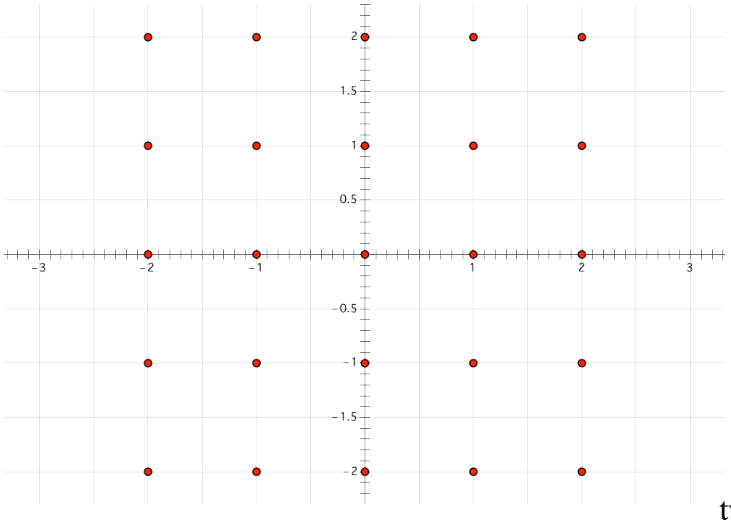


b) Sketch two possible solutions to the slope field one going through the point $(1,1)$ and the other through the point $(0,-2)$.

c) Solve for the general solution to the differential equation above.

d) Solve for the particular solution to the differential equation that goes through the point $(1,1)$.

a) Given the differential equation $y' = -\frac{2x}{3y}$, sketch the slope field on the grid below.



b) Sketch two possible solutions to the slope field one going through the point $(2,0)$ and the other through the point $(1,\sqrt{2})$.

c) Solve for the general solution to the differential equation above.

d) Solve for the particular solution to the differential equation that goes through the point $(1,\sqrt{2})$.