SCHOOL OF MATHEMATICS AND PHYSICS

Slope field

Sketch the slope field of the following differential equations. Then use each slope field to sketch a solution curve that passes through the given point.

1.
$$y' = y - 2x$$
, $(1,0)$.

2.
$$y' = xy - x^2$$
, (0, 1).

3.
$$y' = y + xy$$
, $(0, 1)$.

4.
$$y' = x + y^2$$
, $(0,0)$.

Use the following simulation to check your answers. Click on the link bellow to access:

 $https://teaching.smp.uq.edu.au/scims/Appl_analysis/Slope_fields.html$

