

Problem 1a:

Sketch the slope field by hand for the differential equation $dx/dt = 1 - 0.5t$ and sketch by hand the solution to the initial value problem corresponding to the initial conditions $x(0) = 1$

Problem 1b:

By hand sketch the solution to the differential equation over the VectorPlot corresponding to the initial condition $x(0)=1$

Problem 1 c :

By hand sketch or highlight the solution over the StreamPlot corresponding to the initial condition $x(0) = 1$

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In[39]:= {VectorPlot[{1, 1 - 0.5 t}, {t, -2, 2}, {x, -2, 2}, ImageSize -> 300],  
StreamPlot[{1, 1 - 0.5 t}, {t, -2, 2}, {x, -2, 2}, ImageSize -> 300]}
```

