

In class work **6** has questions **1** through **2** with a total of **6** points. Turn in your work at the end of class *on paper*. This assignment is due *Tuesday 13 Feb 13:20*.

1. For the DE $3y^3 \frac{dy}{dx} + 2x = 0$, do the following:

2 (a) Find a GS to the DE. Remember that a GS has one arbitrary constant.

2 (b) Find a solution to the DE that satisfies $y = 2$ when $x = 1$.

2 (c) Use Desmos to graph the solution you found in part 'b.'

2. Find the numerical value of the definite integral $\int_4^8 \frac{1}{5x+1} dx$.