Math 240 — Hw 5
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Solve the following differential equations.

1. $x'(t) = 2\sin(t)$, $x(\pi) = 2$

2. $x'(t) = 3\cos(t)$, $x(0) = 1$

3. $x'(t) = e^{-t}$, $x(1) = 0$ (try to write your answer in a nice form)

4. $x'(t) = x$, $x(0) = 1$

5. $x'(t) = x^2$, $x(0) = 1$

6. $x'(t) = xt$, $x(0) = 0$

7. $x'(t) = e^{-x}$, $x(1) = 1$