## DIFFERENTIAL EQUATIONS

## BLAKE FARMAN

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| Name: |  |
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| ranic |  |

Find the solution of the differential equation that satisfies the given initial condition.

1. 
$$y' = xe^y$$
,  $y(0) = 0$ .

**2.** 
$$y' = \frac{x \sin(x)}{y}$$
,  $y(0) = -1$ .

3. 
$$P' = \sqrt{Pt}, P(1) = 2.$$

**4.** 
$$y' = -x/y$$
,  $y(0) = 3$ .