# DIFFERENTIAL EQUATIONS 

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Name: $\qquad$

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

1. $y^{\prime}=x e^{y}, y(0)=0$.
2. $y^{\prime}=\frac{x \sin (x)}{y}, y(0)=-1$.
3. $P^{\prime}=\sqrt{P t}, P(1)=2$.
4. $y^{\prime}=-x / y, y(0)=3$.
