Name:_____ Date:_____

AP Calc AB Ms. Loughran

Do Now

1. A solution of the equation $\frac{dy}{dx} + 2xy = 0$ that contains the point $(0, e)$ is

(A) $y = e^{1-x^2}$

(B) $y = e^{1+x^2}$

(C) $y = e^{1-x}$

(D) $y = e^{1+x}$

(E) $y = e^{x^2}$

2. If $\frac{dy}{dx} = \frac{x}{y}$ and $y = -1$ when $x = 1$, find y when $x = 4$.