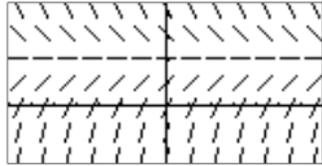


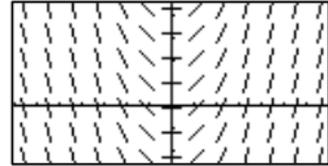
Slope Fields, 10/20

1. Match the slope fields with their differential equations.

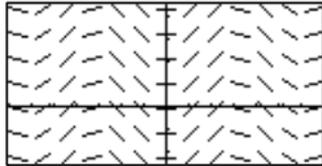
(A)



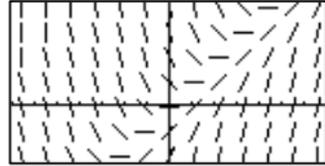
(B)



(C)



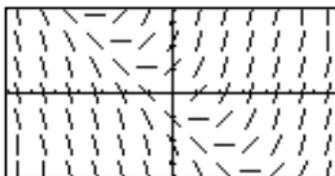
(D)



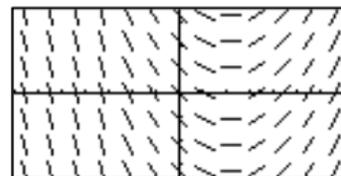
- (1) $\frac{dy}{dx} = \sin x$ (2) $\frac{dy}{dx} = x - y$ (3) $\frac{dx}{dy} = 2 - y$ (4) $\frac{dy}{dx} = x$

2. Match the slope fields with their differential equations.

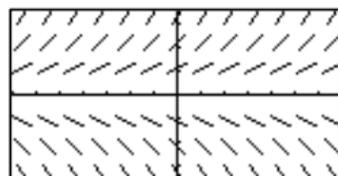
(A)



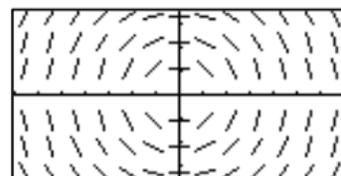
(B)



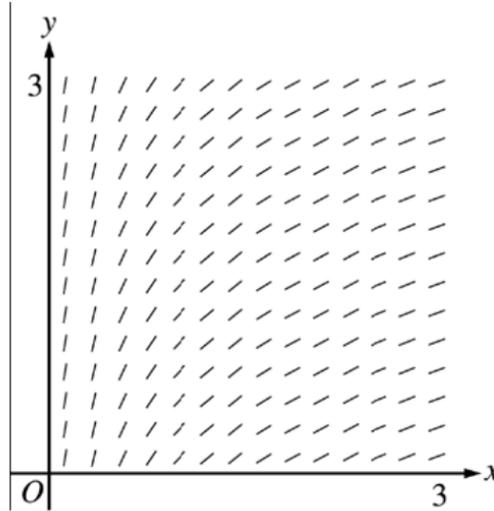
(C)



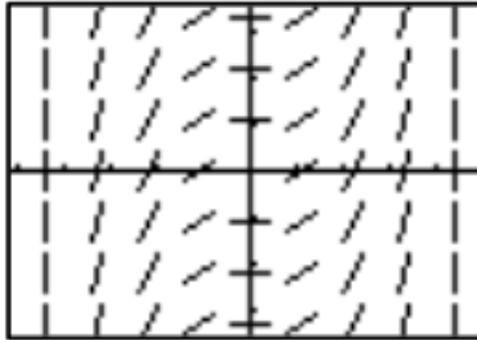
(D)



- (1) $\frac{dy}{dx} = 0.5x - 1$ (2) $\frac{dy}{dx} = 0.5y$ (3) $\frac{dx}{dy} = -\frac{y}{x}$ (4) $\frac{dy}{dx} = x + y$



3. The slope field from a certain differential equation is shown above. Which of the following could be a specific solution to that differential equation?
- (1) $y = x^2$ (2) $y = e^x$ (3) $y = e^{-x}$ (4) $y = \cos x$ (5) $y = \ln x$



4. The slope field from a certain differential equation is shown above. Which of the following could be a specific solution to that differential equation?
- (1) $y = \sin x$ (2) $y = \cos x$ (3) $y = x^2$ (4) $y = \frac{1}{6}x^3$ (5) $y = \ln x$