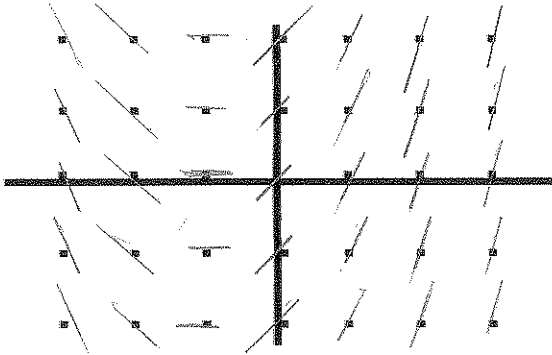


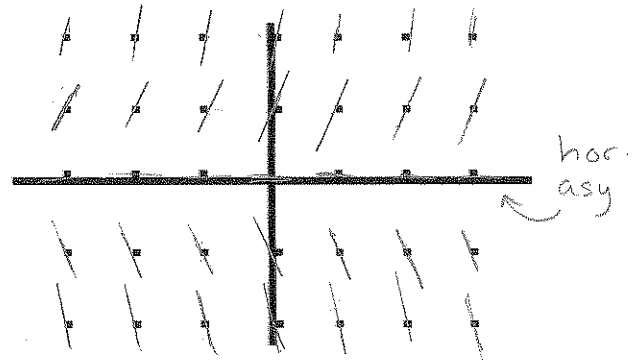
SLOPE FIELDS

Draw a slope field for each of the following differential equations.

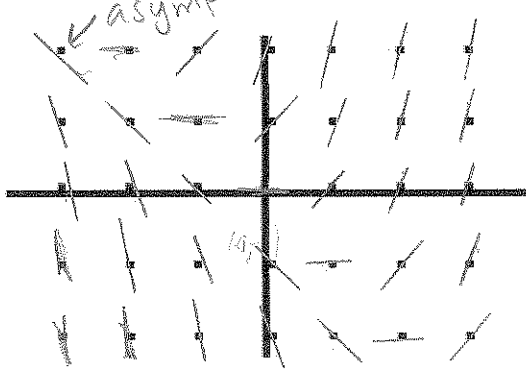
1. $\frac{dy}{dx} = x+1$



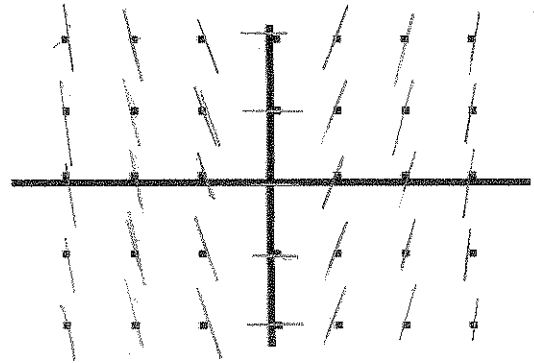
2. $\frac{dy}{dx} = 2y$



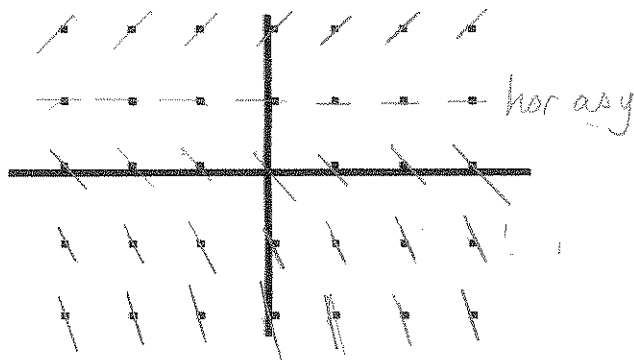
3. $\frac{dy}{dx} = x+y$ slant asymptote



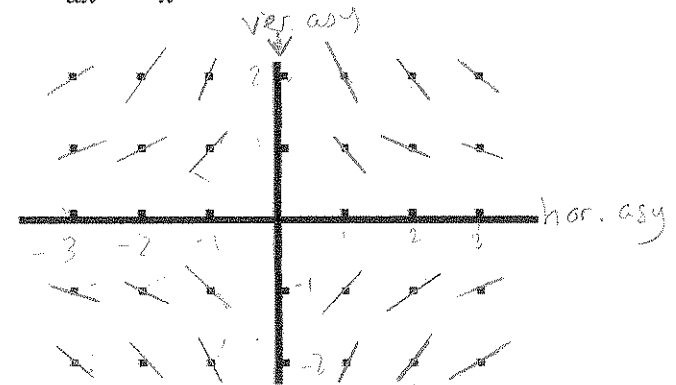
4. $\frac{dy}{dx} = 2x$



5. $\frac{dy}{dx} = y-1$

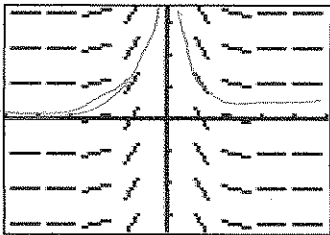


6. $\frac{dy}{dx} = -\frac{y}{x}$



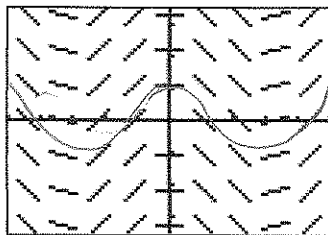
Match each slope field with the equation that the slope field could represent.

(A)



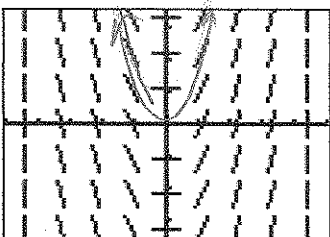
$\frac{1}{x^2}$ (9)

(B)



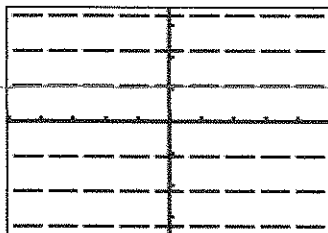
$\cos(x)$ (13)

(C)



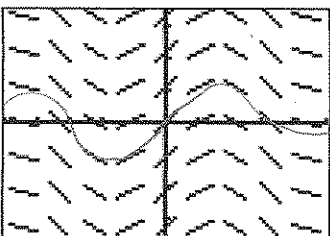
x^2 (9)

(D)



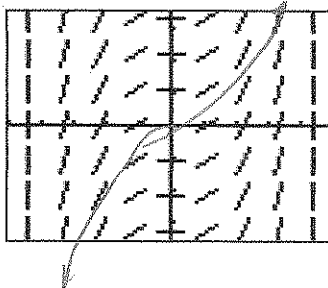
$y = 1$

(E)



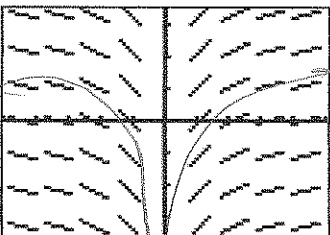
$\sin x$ (12)

(F)



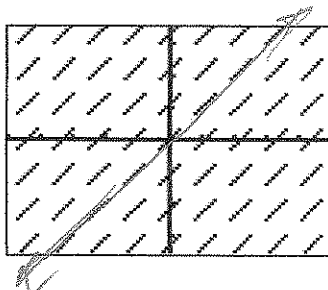
$y = \frac{x^3}{6}$ (10)

(G)



$\ln|x|$ (14)

(H)



(H) $y = x$

- line 7. $y = 1$ $\frac{dy}{dx} = 0$ D
- line 8. $y = x$ $\frac{dy}{dx} = 1$ H
- parabola 9. $y = x^2$ $\frac{dy}{dx} = 2x$ C
- cubic 10. $y = \frac{1}{6}x^3$ $\frac{dy}{dx} = \frac{1}{2}x^2$ F

- even rational function 11. $y = \frac{1}{x^2}$ $\frac{dy}{dx} = -\frac{2}{x^3}$ A
- 12. $y = \sin x$ $\frac{dy}{dx} = \cos x$ E
- 13. $y = \cos x$ $\frac{dy}{dx} = -\sin x$ B
- 14. $y = \ln|x|$ $\frac{dy}{dx} = \frac{1}{x}$ or $-\frac{1}{x}$ G.