

# 1.3 Problems

In Problems 1 through 10, we have provided the slope field of the indicated differential equation, together with one or more solution curves. Sketch likely solution curves through the additional points marked in each slope field.

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

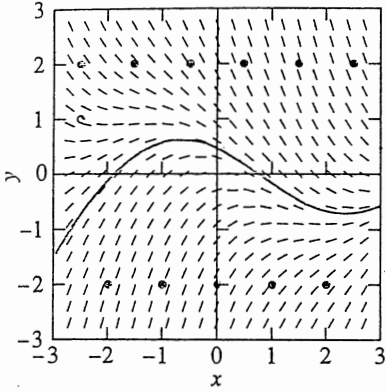


FIGURE 1.3.15

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

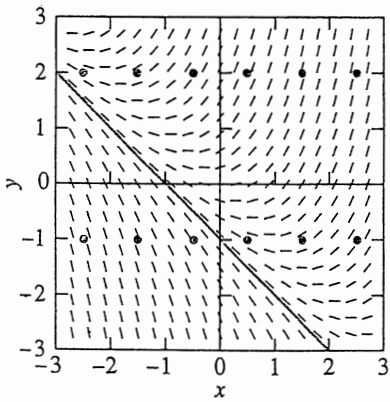


FIGURE 1.3.16

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

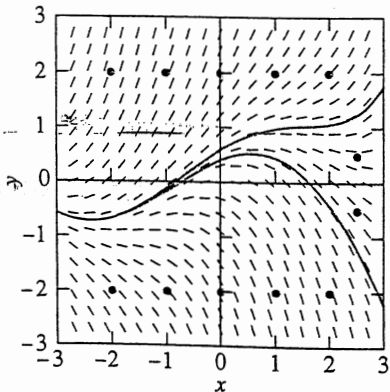


FIGURE 1.3.17

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

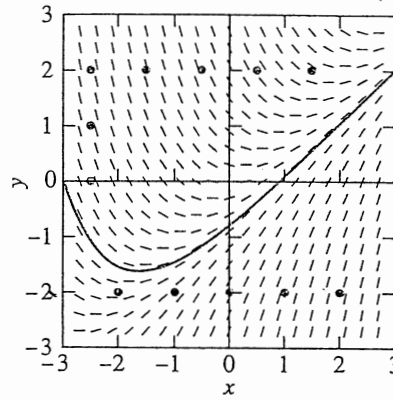


FIGURE 1.3.18

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

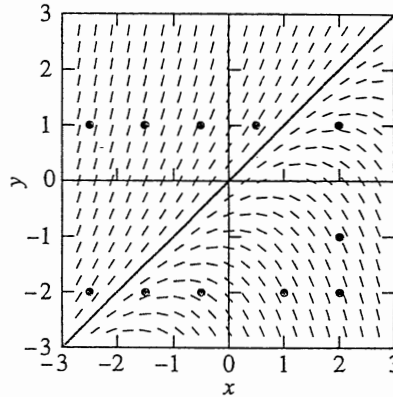


FIGURE 1.3.19

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

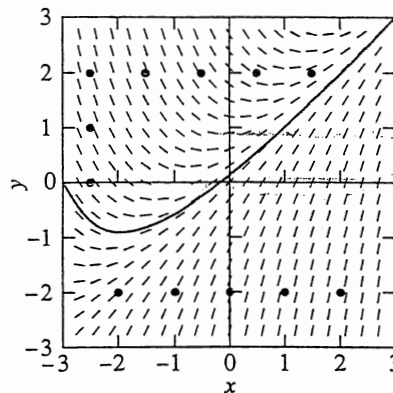


FIGURE 1.3.20