

Give the slope and y-intercept of the given line and then graph it.

8. $2x-3y=6$

9. $Y=-2x$

Solution.

8. An equation for the line in point/slope form is

$$y - y_0 = k(x - x_0),$$

$$y = kx + y_0 - kx_0.$$

In our case we have

$$2x - 3y = 6,$$

$$y = \frac{2}{3}x - 2.$$

Then $k = \frac{2}{3}$. If $x = 0$ then $y = -2$. And finally we graph this line (figure 1).

9. In this case we have

$$y = -2x.$$

Then $k = -2$. If $x = 0$ then $y = 0$. And finally we graph this line (figure 2).

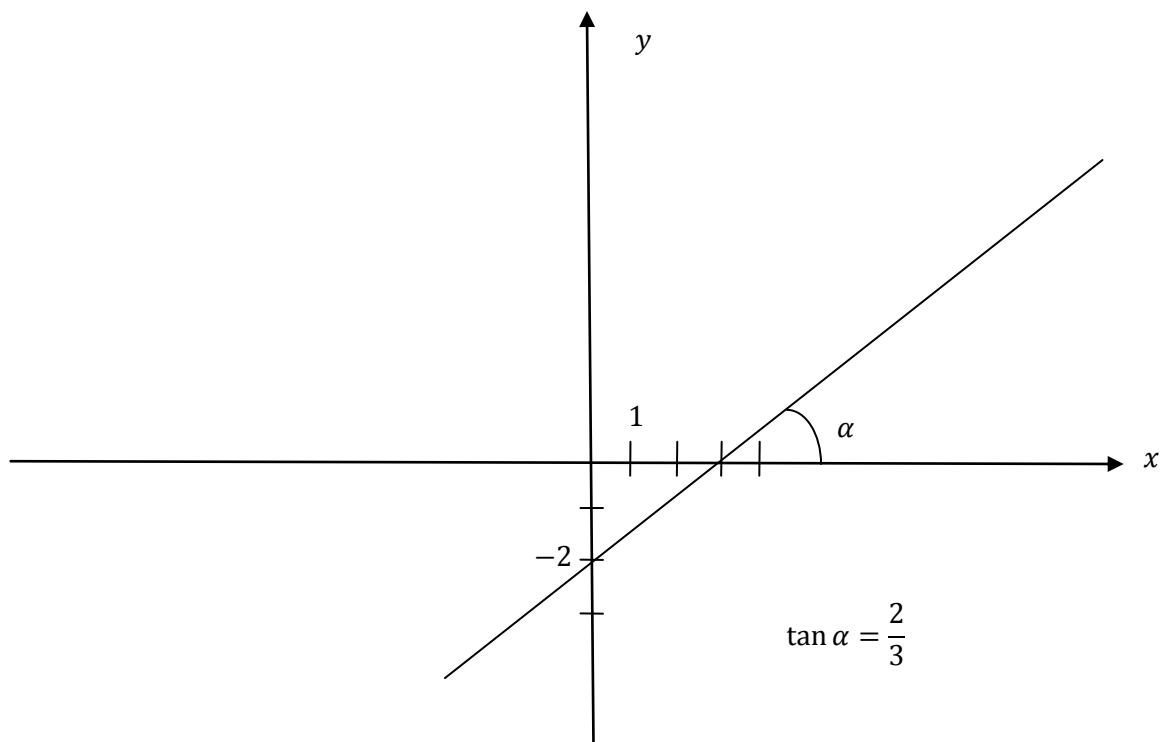


Figure 1.

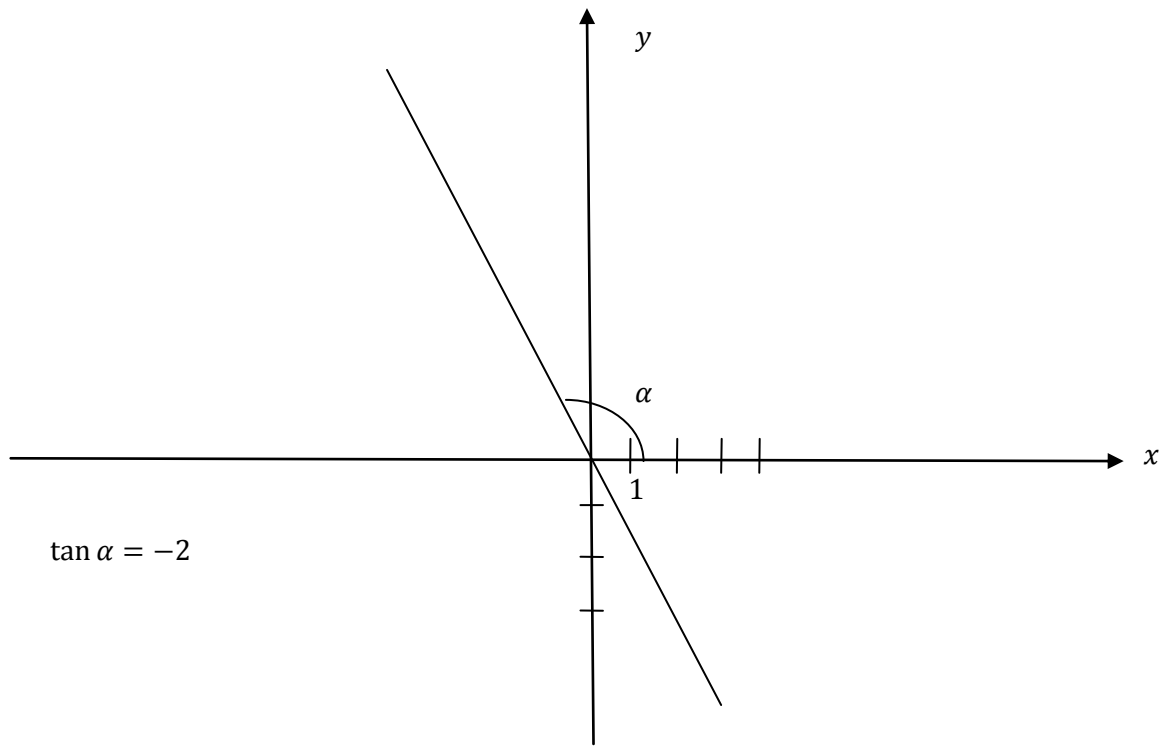


Figure 2