

Exercise 22

Find the point of intersection for the 2 linear functions:

$$\begin{aligned}x &= y + 6 \\ 2x - y &= 13\end{aligned}$$

Solution

The first equation says that x is $y + 6$. Substitute this formula into the second equation.

$$2(y + 6) - y = 13$$

Solve for y .

$$2y + 12 - y = 13$$

$$y + 12 = 13$$

$$y = 1$$

From the first equation, then, $x = 1 + 6 = 7$. Therefore, the point of intersection of the two lines is $(7, 1)$.

