## Exercise 18

For the two linear functions, find the point of intersection: $\begin{aligned} & x=y+2 \\ & 2 x-3 y=-1\end{aligned}$.

## Solution

The first equation says that $x$ is $y+2$. Substitute this formula into the second equation.

$$
\begin{gathered}
2(y+2)-3 y=-1 \\
2 y+4-3 y=-1 \\
4-y=-1 \\
-y=-5 \\
y=5
\end{gathered}
$$

Since $x=y+2=5+2=7$, the point of intersection is $(7,5)$.


