## Exercise 13

Find the $x$ - and $y$-intercepts of the equation $2 x+7 y=-14$.

## Solution

To find the $y$-intercept, set $x=0$ and solve for $y$.

$$
2(0)+7 y=-14 \quad \rightarrow \quad 7 y=-14 \quad \rightarrow \quad y=-2
$$

Therefore, the $y$-intercept is $(0,-2)$. To find the $x$-intercept, set $y=0$ and solve for $x$.

$$
2 x+7(0)=-14 \quad \rightarrow \quad 2 x=-14 \quad \rightarrow \quad x=-7
$$

Therefore, the $x$-intercept is $(-7,0)$.


