## Exercise 43

For the following exercises, write an equation for the lines graphed.


## Solution

The general equation of a line is

$$
y=m x+b
$$

Determine the slope of the line first.


It's the ratio of the "rise" to "run."

$$
m=\frac{-4}{2}=-2
$$

Notice that the line crosses the $y$-axis at 3 , so $b=3$. Therefore,

$$
y=-2 x+3
$$

