11. [6 points] Below is the graph of a function $j(x)$.
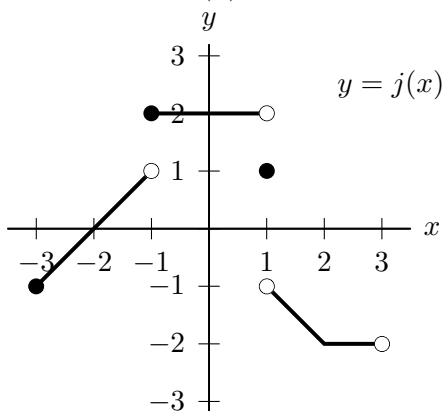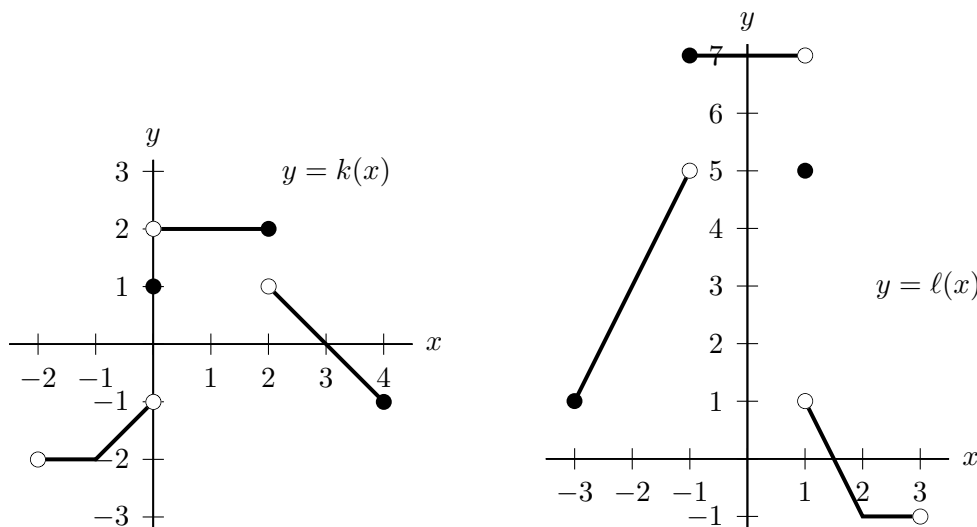

The graphs below show two other functions $k(x)$ and $\ell(x)$ which are transformations of $j(x)$. Write a formula for each in terms of j and x.

Answer: $k(x) =$ _____ and $\ell(x) =$ _____

12. [3 points] Find a formula for one polynomial $p(x)$ that satisfies both of the following properties.

- The degree of $p(x)$ is at least 5.
- The domain of the function $\ln(p(x))$ is the interval $(-\infty, \infty)$.

Note that this problem may have more than one correct answer. You only need to find one correct answer.

Answer: $p(x) =$ _____