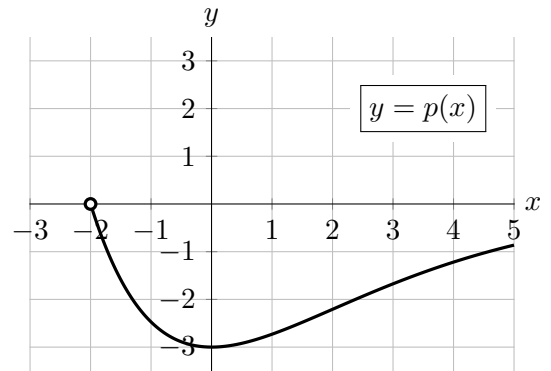
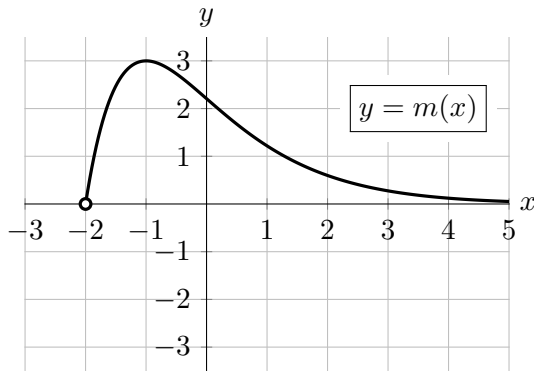


6. [4 points] Shown below at left is a portion of the graph of a function $m(x)$. Shown below at right is a portion of the graph of a function $p(x)$, which can be obtained from $m(x)$ through one or more graph transformations. Find a formula for $p(x)$ in terms of $m(x)$.



Answer: $p(x) =$ _____

7. [9 points] For a constant c , let

$$K(x) = \frac{2^{cx}}{e^{x-c}}.$$

- a. [5 points] Use the limit definition of the derivative to write an explicit expression for $K'(3)$.
Your answer may include the constant c but should not involve the letter K . Do not attempt to evaluate or simplify the limit. Write your final answer in the answer box provided below.

Answer: $K'(3) =$

- b. [4 points] Find the value of c so that $K(1) = 5$. Give your answer in **exact form** and show all your work.

Answer: $c =$ _____