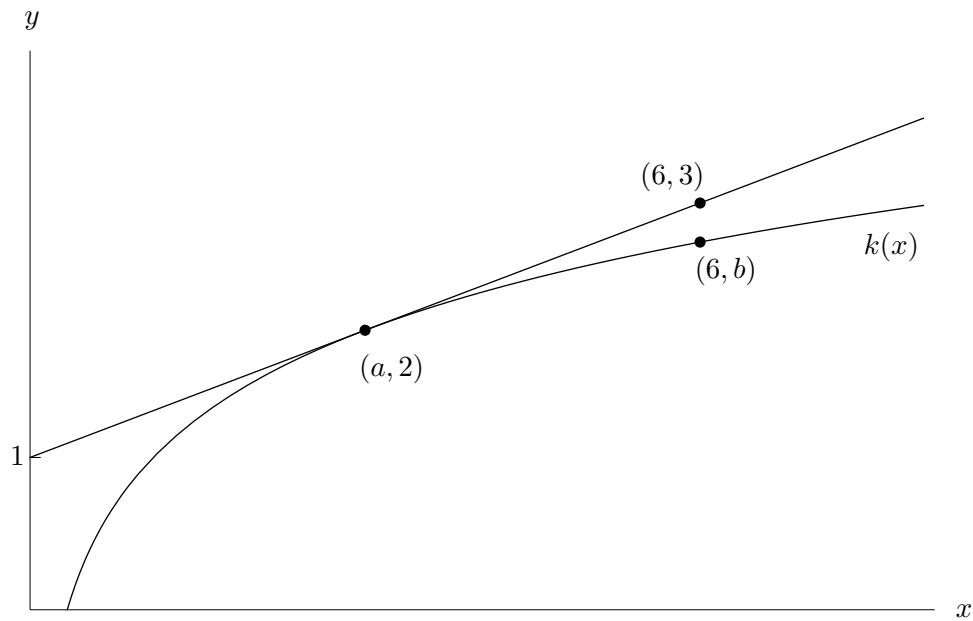


5. [10 points] The figure below shows the graph a function $k(x)$ and its tangent line at a point $(a, 2)$. The average rate of change of $k(x)$ between $x = a$ and $x = 6$ is $1/6$.



Find **exact** numerical values for the following. If it is not possible to find a value, write “NP”. You do not need to show your work.

- a. [2 points] $a =$ _____.
- b. [2 points] $b =$ _____.
- c. [2 points] $k'(2) =$ _____.
- d. [2 points] $k'(a) =$ _____.
- e. [2 points] $k'(6) =$ _____.