(1) Consider the graph below of a population $P$ as a function of time. The 10 may simply represent 10, or it may represent 10 thousand or 10 million.

(a) Describe the growth of the population over time. Be specific.

(b) What may be said about $P'$? How does $P'$ change over time? Be specific, including point A in your description. How does the graph of $P$ change as $P'$ changes?
(2) Consider the graph of $f$ on the right.

(a) What may be said about about $f$ on its entire domain?

(b) What happens to $f'$ as $x$ increases?

(c) What does this imply about the derivative of $f'$?

(3) Consider the graph of $g$ on the right.

(a) What may be said about about $g$ on its entire domain?

(b) What happens to $g'$ as $x$ increases?

(c) What does this imply about the derivative of $g'$?